



HELENA BARBOSA (ORG.)

THEME: THEORY AND MEMORY

THEME

THEORY AND MEMORY: ADDING, INTERPRETING & WEAVING LAYERS

HELENA BARBOSA (ORG.)



Este trabalho é financiado por fundos nacionais através da FCT – Fundação para a Ciência e a Tecnologia, I.P., no âmbito do projeto UID/DES/4057/2016
This work is financed by national funds through FCT – Foundation for Science and Technology within the scope of the project UID/DES/4057/2016



DRX: REGISTOS DE INVESTIGAÇÃO EM DESIGN
DRX: DESIGN RESEARCH RECORDS



THEME

THEORY AND MEMORY: ADDING, INTERPRETING & WEAVING LAYERS

HELENA BARBOSA (ORG.)



ID+ INSTITUTO DE
INVESTIGAÇÃO EM
DESIGN, PORTUGAL,
MÉDIA E CULTURA

ORGANIZAÇÃO ORGANIZATION

Helena Barbosa

COORDENAÇÃO COORDINATION

Vasco Branco (Director ID+, Director@UA)

Heitor Alvelos (Director@UP)

Paula Tavares (Director@IPCA)

Helena Barbosa (Vice-Director@UA)

TÍTULO TITLE

THEME

THEORY AND MEMORY: ADDING,
INTERPRETING & WEAVING LAYERS

EDIÇÃO EDITION

UA Editora – Universidade de Aveiro

Universidade do Porto

IPCA – Instituto Politécnico do Cávado e do Ave

ID+ Instituto de Investigação em Design,
Media e Cultura

DESIGN

Francisco Providência

TIRAGEM PRINT RUN

200

IMPRESSÃO PRINTED BY

RealBase

DEPÓSITO LEGAL LEGAL DEPOSIT

453410/19

ISBN

978-972-789-582-3

DATA DE PUBLICAÇÃO PUBLICATION DATE

1ª edição – 2018

© all rights reserved

ÍNDICE

INDEX

04	Sobre esta coleção Direção ID+
06	About this collection Directors ID+
08	Presentation of the group THEME – Theory and Memory: Adding, Interpreting & Weaving Layers
13	1. About the book THEME – Theory and Memory: Adding, Interpreting & Weaving Layers Helena Barbosa
19	2. The Good Society Project: An Action Frame for the 21st Century Victor Margolin
39	3. Exploring The Interdisciplinary Process In Design Education Suzana Dias & Susana Jorge
49	4. Is there an Ethical Role for the History of Design? Redeeming Through History the Possibility of a Humane World Clive Dilnot
71	5. Intertwining Histories of Design Step One: Portraying the Map of Present European Design History Through 10th ICDHS Conferences (1999–2014) Anna Calvera & Helena Barbosa
83	6. A General Framework. From Design Function to Design Factor: The Hypothesis of the Three Origins of Design Applied to the Case of Barcelona Anna Calvera
107	7. Identidade Gráfica dos Primeiros Tratados Musicais Impressos em Portugal Ana Currálo
117	8. Ways of Participating in the Current Museological Discourse on Design Sandra Antunes
123	9. The Correspondence Principle Alexandra Beleza Moreira
132	Investigadores Researchers

SOBRE ESTA COLEÇÃO

A presente coleção, **DRX: Registos de Investigação em Design**, vem assinalar dez anos de significativa produtividade académica e científica na Investigação em Design em Portugal. Por via da criação do Instituto de Investigação em Design, Media e Cultura [ID+] em 2008 foi possível potenciar esta disciplina científica a nível regional; é agora o tempo certo para congregar a sua correspondente produção de pensamento numa série de volumes, dotados de perspetivas próprias, mas convergentes no mote do ID+.

O ID+ é uma unidade de investigação centrada na área do Design, mas alargada a outras áreas criativas da Arte e da Cultura. Desde a sua fundação o ID+ tem norteado a sua atividade pelas seguintes orientações estratégicas: (1) intervir ativamente na produção e aplicação de conhecimento, potenciando a função de mediação cultural que caracteriza o Design, a par do questionamento social e da inovação poética que a Arte permite; (2) demonstrar a importância estruturante do Design e da Arte na definição e implementação multidisciplinar de cenários credíveis para o crescimento sustentá-

vel onde a qualidade de vida seja um pressuposto de prosperidade;

(3) validar o Design e a Arte enquanto agentes éticos de uma cidadania exigente, crítica e participada, cultivando a sua apropriação e tradutibilidade a nível social, cultural e económico;

(4) escrutinar a contemporaneidade da herança cultural, na sua relação dinâmica com os novos paradigmas tecnológicos e mediáticos.

O ID+ desenvolve esta missão principalmente na região Norte de Portugal e noutras regiões periféricas, mas também em redes de cooperação nacionais e internacionais. Opera contextualmente produzindo, transferindo, traduzindo e comunicando o conhecimento científico e profissional sobre o design, os media e a cultura em ambientes onde poderá gerar benefícios. O ID+ está atualmente organizado em oito grupos de investigação, cobrindo perspetivas específicas, mas mantendo a capacidade de reconfiguração e cooperação de acordo com os vários projetos e desafios em jogo:

- CAOS: interfaces com indústrias locais
- DESIS Lab: redes de inovação social e sustentabilidade
- LUME: laboratório para os media inesperados
- MADE.PT: design crítico para o crescimento e prosperidade
- PRAXIS & POIESIS: prática e teoria da arte
- SD Lab: estratégia e gestão do design
- THEME: teoria e memória.

Para além dos grupos referidos, PERIPHERIES é um grupo em fase de criação na Universidade da Madeira, que pretende investigar a relação do Design com a Natureza, a Cultura, o Turismo e outros conteúdos relacionados com o Oceano.

A escala regional do ID+ é assegurada através de uma estrutura de consórcio baseado num acordo formal de cooperação entre a Universidade de Aveiro, a Universidade do Porto e o Instituto Politécnico do Cávado e do Ave. A convergência das respetivas competências institucionais garante um grau de hibridação e massa crítica que favorece um território de investigação expandido. A equipa conta, atualmente, com 168 membros, dos quais 69 são doutorados integrados. Além das Universi-

dades de acolhimento e do Politécnico acima mencionados, a proveniência dos membros alarga-se a outras dez instituições de ensino superior e de investigação.

O ID+ reúne um número significativo de jovens investigadores formados em Design e em outras áreas criativas e culturais. Nesse contexto o ID+ tem sido pioneiro na construção de um modelo operacional para uma cultura de investigação adequada ao Design, gerada entre a primeira geração estruturada de programas de doutoramento a nível nacional. A consolidação de uma cultura de investigação exige tempo e é por isso que decidimos incluir na celebração dos dez anos de existência do ID+, o desenvolvimento do corpo editorial já iniciado, preocupado tanto com a validação da investigação de acordo com os cânones científicos, como com a tradução e o impacto dessa investigação junto de públicos mais amplos e diversos.

A publicação desta primeira coleção de **DRX: Registos de Investigação em Design** tem como objetivo sistematizar as dinâmicas de cada grupo, que se apresenta à comunidade nacional e internacional com a escolha dos artigos científicos mais relevantes que produziu ou escritos por personalidades de referência internacional com os quais trabalham ou trabalharam. A todos eles – Alastair Fuad-Luke, Bruce Brown, Clive Dilnot, Sophie Van der Linden e Victor Margolin – o nosso agradecimento pelas suas valiosas colaborações e, em especial, aos familiares da saudosa Anna Calvera (1954–2018), por terem autorizado a publicação de um texto da sua autoria.

Com esta frente editorial que agora se inicia, o ID+ pretende incrementar a visibilidade do seu trabalho de investigação. Esperamos que conduza a novos desafios, ao fortalecimento de parcerias, à promoção de novas colaborações, qualificando novos horizontes de produção de sentido, conhecimento e valores com impacto no futuro coletivo.

A Direção do ID+

Vasco Branco (Diretor do ID+, Diretor@UA)

Heitor Alvelos (Diretor@UP)

Paula Tavares (Diretora@IPCA)

Helena Barbosa (Vice-Diretora@UA)

ABOUT THIS COLLECTION

The present collection, **DRX: Design Research Records**, marks ten years of significant academic and scientific productivity in Design Research in Portugal. By means of the creation of the Research Institute for Design, Media and Culture [ID+] in 2008 it was possible to promote this scientific discipline at a regional level; it is now the right time to bring together their corresponding written output into a series of volumes, with their own perspectives, both specific and convergent in the motto of ID+.

ID + is a research unit focused on the area of Design, extended to other creative areas of Art and Culture. Since its foundation, ID+ has guided its activity through the following strategic guidelines:

- (1) to actively intervene in the production and application of knowledge, while enhancing the nature of cultural mediation that characterises Design, while maintaining the social questioning and poetic innovation that art provokes;
- (2) to demonstrate the structuring importance of Design and Art in the multidisciplinary definition and

implementation of credible scenarios for sustainable growth where quality of life is a prerequisite for prosperity;

(3) to legitimize Design and Art as ethical premises of a demanding, critical and participating citizenship, fostering its appropriation and translatability at social, cultural and economic levels;

(4) to scrutinize the contemporaneity of cultural heritage in its dynamic relationship with new technological and media paradigms.

ID+ develops this mission primarily in the Northern region of Portugal and peripheral environments, as well as in national and international cooperation networks.

It operates contextually by producing, transferring, reverting and communicating the scientific and professional knowledge of design, media and culture into environments where it may generate benefit.

ID+ is currently organised in eight working groups, covering specific outlooks while maintaining the capacity for reconfiguration and cooperation according to the various projects and challenges at stake:

- CAOS: interfaces with local industries
- DESIS Lab: networks for social Innovation and sustainability
- LUME: lab for unexpected media
- MADE.PT: critical design for growth and prosperity
- PRAXIS & POIESIS: art practice and theory
- SD Lab: strategy and design management
- THEME: theory and memory

Besides the above groups, PERIPHERIES is under creation at the University of Madeira, focusing on Nature, Culture, Tourism and Ocean-related content. The regional scale of ID+ is ensured through a consortium structure based on a formal cooperation agreement between the University of Aveiro, the University of Porto and the Polytechnic Institute of Cávado and Ave. The convergence of the respective institutional competences ensures a degree of hybridity and critical mass that furthers an expanded research territory. As of 2018 the team comprises 168 members, of which 69 are integrated PhDs. Besides the aforementioned host Universities and Polytechnic, member

provenance includes ten further higher education and research institutions.

ID+ gathers a significant number of young researchers from Design and other creative and cultural areas. ID+ has therefore, in this context, pioneered an operative model for a proper research culture in Design amongst a first, structured national generation of PhD students. The consolidation of a research culture demands a temporal scope and this is why we decided to include in the celebration of the ten years of existence of ID+, the development of the editorial venture hereby, pertaining to the validation of research according to scientific canons, as well as with the translation and the impact of this research on broader and more diverse publics.

The publication of this first **DRX: Design Research Records** collection aims to systematize the dynamics of each group through a selection of the most relevant scientific articles it has produced together with others written by, currently or formerly collaborating, internationally recognized experts. To all of them – Alastair Fuad-Luke, Bruce Brown, Clive Dilnot, Sophie Van der Linden and Victor Margolin – our sincere thanks for their valuable contributions to this effort, and especially to the family of the late Anna Calvera (1954–2018) for having authorized the publication of one of her texts.

Through this new publishing venture, ID+ ultimately aims to increase the visibility of its research work. We hope this will lead to new challenges, the strengthening of current partnerships and fostering new collaborations, thus qualifying new outlooks for the production of meaning, knowledge and values that will impact our collective future.

ID+ Board of Directors

Vasco Branco (Director of ID+, Director@UA)

Heitor Avelos (Director@UP)

Paula Tavares (Director@IPCA)

Helena Barbosa (Vice Director@UA)

PRESENTATION OF THE GROUP THEME THEORY AND MEMORY: ADDING, INTERPRETING & WEAVING LAYERS

Constituted in 2018, the Research Group THEME – Theory and Memory: adding, interpreting & weaving layers has as its vocation the exploration and intersection of the different areas, both theoretical and substantive, that underpin the comprehension of the history, culture, and education of design in the wide sense. Drawing extensively on design theory and questions of memory and history that can be addressed from various angles, the group focuses its work in two main areas: (a) The understanding of the role of the image in contemporary culture including both scientific and artistic representations. This includes the phenomenology and epistemology of the image; the philosophy of depiction; phenomenology of perception and the broader study of visual culture and the theory of the image. (b) Research into material and intangible culture, especially in relation to the history of design in Portugal. This focus also includes the study of design culture in general; of design education, and design studies of the roles of design in preserving and representing heritage and cultural heritage. Theoretically, the group brings

together a very wide range of approaches using the integrated diversity of perspectives projects to enhance, extend and deepen the research and its outcomes. The specific research profiles of each member or element in the group enables it to intensify and create convergence in terms of research whose knowledge-bases complement each other and which are structured to function as a whole, contributing to a more cohesive and dynamic knowledge on these topics. Practically, in order to increase the relevance of the work to the wider culture of Portugal the groups will extend the theoretical relationships with applied components aimed at promoting the transfer of knowledge between academia, institutions, companies and the public sphere.

The actions that are implicit in the title of the THEME group - the ideas of adding to, of interpreting & of weaving together disparate layers of material - are the consequence of the aims and needs of the researchers. Their work stresses the importance of connections between theory and practice. The idea of weaving is related with interlacing and entwining knowledge in several directions in order to achieve consistent and innovative results through research that can be applied to practical projects. It encompasses also the exploration of approaches that connect specific research themes to the work of other fields, this providing not only for the development and integration of new aspects for the research, but also helping to promote a wider application and utilization of research findings. For these reasons, the group focuses on issues in design history and theory and on issues of cultural memory. These approaches, while grounded in a disciplinary starting point can be addressed from various angles that are transversal to the subject/topic/issues of research and when considered collectively become interdisciplinary. This allows the research topic to be understood and presented in multiple ways, offering greater applicability for this understanding to inform practical projects. Consequently, the group's research approaches are wide and although clearly anchored in the theory, the obtained results have

the purpose to establish connections with practice avoiding the centrality of research only in the theoretical component.

The group's strategy for the next 4 year period is that will seek to develop its research interests and profile both in terms of research outputs and to develop advanced training, through the creation of PhD grants and Post-Doctoral positions linked to the projects and R&D to be developed. In line with the group's overall focus two inter-linked approaches will be developed:

1) Research into the phenomenology of the image around images produced by science;

2) Research into the historical culture and depiction of design and heritage (both built and immaterial) in Portugal. Substantively, these approaches will be developed (at least in the first instance) around a small number of selected themes:

a) **In relation to the phenomenology of the image**, the development of applications for R&D projects as collaboration with institutions related to health and molecular and cellular biology, such as the IPO (Coimbra). This approach will add a different component and speaks to the "image".

b) **Further development of the on-going CIDES.PT project on history of the Portuguese design**. This has four main initial components:

1) To prepare a new application for funding in order to proceed with the development of the CIDES.PT project;

2) To apply the knowledge acquired in investigations carried out in the field of the master's degree, PhD, Graduate Internship of PhD, and Post-Doctoral work in the continuity of the investigative development applied to the work of Portuguese designers and on *revealing different types of artifacts*;

3) To develop and publish a small collection of books on the history of Portuguese design focused on

specific themes: e.g., Design and Professional Activity; Exhibitions; Education; Institutions and bodies; Furniture Design; Jewellery Design; Design illustration; Editorial Design; Poster Design; Typography design. This also includes a project entitled "PLASTIC@ITEM.PT" which will research and publish on products/design objects manufactured in Portugal made of plastic.

4) To establish extended collaboration with another group of ID + researchers, the MADE.PT as partner in the creation of museographic projects to develop exhibitions around the history of Portuguese design. Collaboration will also happen with other groups inside and outside the research unit, whenever necessary.

c) **Research projects which combine questions about the image, with the CIDES.PT interests in the history of design, heritage and culture**. The immediate focus of this strand will be three projects connected with the Portuguese poster:

1) To continue the advanced training, at the level of PhD supervision as the development of research centered on the poster archive (c. of 2000 copies, from the 1970 to the present day) of the 'Cooperativa Árvore', located in the Porto (ongoing collaboration in University of Aveiro) at the level of digitalization, organization, cataloguing and interpretation from the point of view of the design history of them, and convert this knowledge into the materialization of exhibitions, books and catalogues;

2) To publish a book in partnership with the Municipality of Viana do Castelo with the title "100 anos de Cartazes da Romaria da Senhora de Agonia (1910-2010)" [100 Years of Posters of the Pilgrimage of the Senhora da Agonia (1910-2010)];

3) To carry out the publication and thematic exhibitions centered on the master's research "Hermeneutic's of the Port wine poster of the late nineteenth century to the beginning of the 21st century" at the Douro Museum (protocol under development).

d) **Research projects which combine explorations in design education with questions of heritage and the history of Portuguese design and culture**. As an initial exploration the project "Design and Education: interpretation of the Figurado of Barcelos" is a design educational project developed in collaboration with the Barcelos' Pottery Museum and the local Tourism Office. As an innovative pedagogical experience developed through collaborative learning students will explore the connection of the Figurado of Barcelos with the memory and their knowledge of the anthropological artifact.

e) **Research in the history of design focused in cinema posters within the scope of collaboration with the 'Academia Portuguesa de Cinema' [Portuguese Academy of Cinema] and with the 'Cinemateca Portuguesa' [Portuguese Film Library] in a study centered around their archive**. Simultaneously, create collaboration with the 'Trindade Cinema' for the weekly communication of the programming, with 'Nitrato Films' (Portuguese distributor), and also to collaborate with some Portuguese filmmakers to consolidate networks in this context for future research work.

DISSEMINATION OF RESEARCH AND CONNECTIONS

In general terms the group will be active in the dissemination of research and in building research connections.

Conferences:

Organizing international events of the ICDHS – International Committee of Design History and Design Studies (2018, 2020 and 2022); AICV-International Conference Art, Illustration and Visual Culture (2019, 2021), EAW International Conference Electroacoustic Winds (2019, 2020, 2021, 2022). In addition, maintaining and extending participation as members of the Scientific Committee of other conferences beyond those cited.

Research connections:

Expanding the network of international partners at the level of theory, design history, cultural heritage, visual and culture material, in order to establish future partnerships for applications of funded research projects. Here also to take advantage of the ERASMUS + programme to invite different specialists in the thematic areas of the group and to organise, lectures, seminars and workshops. Journal publications: including: writing scientific articles, whether for conferences and for scientific journals of the specialty; maintaining and expand editorial activity with journals; create a set of periodic publications to give visibility to the research carried out by the members of the group, putting it to the discussion of their peers.

Integrated PhD

Alexandra Moreira

Ana Curralo

Helena Barbosa (coordinator)

Sandra Antunes

Suzana Dias

PhD Students

Aurora Brochado

Igor Ramos

HELENA BARBOSA

[ID+] Research Institute for Design, Media and Culture
Department of Communication and Art
University of Aveiro
Portugal
helenab@ua.pt

1 ABOUT THE BOOK THEME THEORY AND MEMORY: ADDING, INTERPRETING & WEAVING LAYERS

In the context of contemporaneity it is possible to encounter and think about the existence of old former paths as well as those more recent and imagine what the future ones might be. In research, the exploration of these different spaces from the diachronic point of view can define and promote fields of action for discovering new understandings about the specificities of the topics to be addressed. Why are they made? How are they made?

The possibilities are endless, both in themes and approaches, however, design from the point of view of theory and memory is concerned with emphasizing the importance of discipline not only in the resolution and reflection of problems related to reality, as well as increasing knowledge in several aspects where design that can be crossed with other disciplines. This permeability is present in some of the contributions presented in this book, the result of concerns and interests expressed by the researchers, with the purpose of alerting, clarifying, reflecting and disseminating knowledge by the hand of theory.

Considering the set of the articles in this volume some keywords stand out such as: design activity, ethics, history of global worldviews, new challenges, design education, interdisciplinary practices, methodological strategies, design research, history of design, transnational history, museology, digital archives, depiction, image, perceptual experience, epistemology and phenomenology.

In the organization of the articles it's sought to obtain a logical structure of contents, despite the similarities and dissimilarities between them. In this sense, it was decided to select themes that departed from a more comprehensive view even reaching more particular situations taking into account the proximity between these themes explored in the investigations carried out by the different authors.

The first article, written by Victor Margolin, is entitled The Good Society Project: An Action Frame for the 21st Century. It reveals the author's concerns about design activity and the impact designers can have

on the changing world. The proposed "action frame" adopts a set of assumptions in keeping with the ethical issues that address global and local situations, looking to the past in order to build a better future. Utopian examples analysed in distinct diachronic moments allow to reconsider the present. In the face of the existing world situation, it is necessary to attach importance to the creation of basic services and products, leading to more sustained behavioural models of what a "good society" can be. "The Good Society Project" promotes design schools as researchers for developing proposals for new actions that emphasize values and strategies in the construction of a more balanced future, rather than predicting one. The set of themes addressed in this article is important and constitutes reflective moments that move between theory and practice with the intention of emphasizing the importance of design as a tool for creating solutions for a better society.

The article "*Exploring the Interdisciplinary Process in Design Education*" by Suzana Dias and Susana Jorge presents a contiguous line related to the previous text, but mainly centered on the methodologies that can be associated to education design, applying them in the discipline of graphic design in exercises performed by undergraduate students. The theory declines in the practical component with approaches that promote interdisciplinarity and reflection on a better preparation of students with the purpose of making them constructors of meaning instead of constructors of objects. The possibilities in interdisciplinarity and the collaborative processes that follow from them promote interpretations and results more in line with reality. Thus, these are more consistent because they are the subject of a broad reflection on the implications of including other disciplines. Simultaneously, design is a discipline with a set of ramifications, and its intrinsic complexity in embracing other disciplines promotes a richer understanding of students involved in different areas in the development of the process between 'thinking' and 'doing'. The authors demonstrate the richness of the results through the presented methodology, emphasizing the disciplinary connections as

a means to promote knowledge and to involve students in better ways in learning.

In a differentiated perspective, but related to the previous articles, the text of Clive Dilnot titled – *Is there an ethical role for the history of design? Redeeming through history the possibility of a humane world* – departs from an issue centered on the meaning of "doing and thinking", bridging designing and history of design through examples. Recognizing acute changes in the understanding of how it is perceived the world today, and consequently of the implications of these changes, it argues for the need for reflexive exercises on contemporary political, economic and social weaknesses and how they impact the world in design and vice versa. It considers the lack of autonomy of the design, with the exceptions, and these should be represented by critical thoughts and actions that focus on projects that solve the problems of Humanity. Essentially, it makes reflective assumptions about the understanding of design and its role, opening up in a broader and innovative way the interpretation of concepts and ideas that are associated with it, using theory and a historical vision for its understanding in relation to both the past and future. He also says that the history of design is fundamental in design research, by amplifying resonances concerning things that focus on the mere appearances of things cannot reach.

The following article – "*Intertwining histories of design step one: portraying the map of present European design history through 10th ICDHS conferences (1999-2014)*" by Anna Calvera and Helena Barbosa presents the dynamics resulting from themes explored in the context of the ICDHS – International Committee for Design History and Design Studies and a workshop held in 2014, mentioning the more or less representative presence of countries during the various editions of the ICDHS in the context of what they propose to be a new redefinition of the European map. In order to do this, they explain the importance of distinct realities (local, regional and national), moving beyond the conventional boundaries of what is meant

by Europe, by creating new mental and conceptual maps that emerge through the link of investigative interests through the history of design. The authors present a comparative study of participations through maps highlighting the participating countries, number of participants and papers submitted per country, in each organized conference. The set of information obtained showed a new design of the European map, with a distorted configuration in relation to reality, and in parallel, reveals that the countries located at the North and South ends of this geographical space are the most active in research in both the history and study of design.

In the continuity of the investigation carried out by Anna Calvera, a case centered in Barcelona is presented, through the article "*A General Framework From Design Function to Design Factor: The Hypothesis of the Three Origins of Design Applied to the Case of Barcelona*". The author explores the use and meaning of the words 'disseny' and 'diseño' from the historical point of view through understanding and the evolution of the activity in the Barcelona context together with the phenomenon of the word 'design', through understanding the discipline in international scenarios. The author recognizes the existence of differentiations derived from distinct realities of origin not only culturally but also diachronically and in the way these terms were adopted and understood. According to the author, the luxury and the design market are related to the need to acquire new products and the appearance of new services, explaining what happened in Barcelona. At the same time, the increase in the representativeness of these services and products implied a reflection of the activities between the industry and the art giving rise to the appearance of teaching in order to prepare, conveniently, specialists still in the 18th century. Calvera, says that the basis of this genesis implied a second moment where design becomes an aesthetic activity, functioning as a cultural mediator between the level of education and the taste of consumers. At the same time, the industrial conditions of Barcelona

and the gradual awareness of the importance of design allowed an enhancement and increase in value of the discipline in these scenarios.

In a geographically and chronologically different place, the researcher Ana Curraro presents the article – "*Graphic Identity of the First Musical Treaties Printed in Portugal*" – published in the 17th century, performing a graphic analysis of these artifacts in order to understand the decision-making motives in the construction of visual communication, as well as reveal the history of the printing of these documents. To do this, she divides her analysis into two periods: the first related to cover pages and the second to pagination and graphic composition. In these approaches, she identifies a set of graphic arguments that are part of the visual rhetoric of the time, to which, she verified that the treaties in question did not deviate, conceptually, from what was done in that period. Consequently, the pages followed identical models inspired by the design of other publications, resulting from the mechanization and technical constraints which existed in assembling movable characters, lines, paragraphs and creation of margins, solved by the printers more as an execution response due to a mechanical rather than conceptual process. The greatest graphic differentiation of these objects in relation to others consists in the inclusion of musical guidelines, and with some differences mainly in regards composition.

In relation to Sandra Antunes' article – "*Ways of Participating in the Current Museological Discourse on Design*" – the author reflects on the importance of increasing knowledge pertaining to the artefacts existing in museological spaces by ways of participation through the World Wide Web and other digital technologies, using the design museums as a lens for reflecting on what the discourses in this environment can be. Furthermore, given the specificity of the design discipline, design museums tend to dissociate themselves from the 'traditionalisms' of other museums because they move away from mere contemplation of objects by promoting differentiated

forms of understanding about products through experience and interaction where visitors actively participate in establishing collaborative links with the museum, promoting distinct and innovative visions of artifacts, contributing to a deepening of knowledge of these same objects guided by the memory and unique experience of each visitor. Simultaneously, she refers to the importance of having a web archive, due to the ephemeral nature of some artefacts, to be included in these museums, emphasizing the site as an asset, functioning as a potentiating interface of "knowledge" or "learning" between the museum and the public.

Finally, Alexandra Moreira's last article – "*The Correspondence Principle*" – also explores experience, but in the context of the mechanical root image, in an approach centered on the perception. At the same time, the author uses cognition as a process for understanding it. Thus, the perceptual approach of the photographic images is separated from the interpretation, to focus on the materiality of the image promoting an epistemic vision, articulated with a phenomenological approach. This methodology allows obtaining a stabilized experience between the perceived and what is perceived. It also establishes the correspondence between the experience of those who observe the photographic images, referring to this recording technology as a tool for understanding the relationship with reality and the way it is perceived, dissociating itself from interpretations assigned to other forms of representation by this reality. Moreira considers that there is a close relationship between perception and experience and through these it is possible to obtain a more exact notion of the phenomena of representation. She also explores questions related to the similarity of the sensitive features of the object that appear in the image, with the apparent characteristics of the real object.

VICTOR MARGOLIN

University of Illinois
Chicago, USA
victor@uic.edu

2 THE GOOD SOCIETY PROJECT: AN ACTION FRAME FOR THE 21ST CENTURY*

19

*THE PAPER WAS PRESENTED AT A CUMULUS CONFERENCE. IT WAS PUBLISHED IN THE PROCEEDINGS ENTITLED, "GLOBAL THINKING, LOCAL ACTION, FUTURE LIFE;" (HELSINKI: AALTO UNIVERSITY SCHOOL OF THE ARTS, DESIGN, AND ARCHITECTURE, 2013).

INTRODUCTION



Fig. 1

The way designers act, not only what they actually do but also what they propose to do, is one of the most important means to change the world. We live amidst the work of designers – products, systems, services, and even political and legal structures that were

shaped for particular purposes and which provide a frame for how we may be inspired to act and what we are actually able to accomplish. When all these entities work well, design is a productive activity that enables positive action. When they do not, design becomes an obstacle to meaningful change.

(Fig. 2) The way design contributes to what I will call an *action frame* is crucial because it is the action frame, which is shaped by ideals and beliefs about how the world should be, that provides both the opportunities and constraints for the activities of everyone. An action frame is the set of assumptions of how the world could be and how we might live in it that animates our human activity. It is the source of the values that guide our actions as well as the source of the worldviews that justify our behavior. Thus existing political and economic systems and institutions, rules and laws, and also customs and habits are all part of an action frame that makes them possible, while making alternatives less possible or even not possible at all. The question before us today is whether the



Fig. 2



Fig. 3

action frame that has produced the world we live in is adequate to meet the challenges of the 21st century. I do not believe it is. Consequently we need to rethink the way we organize our lives at every level from the global to the local.

(Fig. 3) I have therefore proposed as the title of this presentation, "The Good Society: An Action Frame for the 21st Century." By a good society, I mean one that is fair and just. It insures that all citizens can received the goods and services they need to survive with dignity. I use the good society as a construct or prototype of a *society that could be* and in fact one whose contours are already being shaped by a multitude of activities around the world. The purpose of envisioning such a prototype is to help make sense of the many forces of positive change that are currently in motion and to aid in imagining how they could contribute to forms of shared social life at a large scale.

I have divided my presentation into four parts. In the first part, I demonstrate that the desire to think about the world in an entirely new way is not strange for designers and therefore my proposal to take it up again is not such a radical proposition. In the second part, I to trace a relatively brief history of global worldviews to show both the potential and limitation of building on those views to pursue the good society project. In the third part, I explain why I believe the existing action framework is inadequate and I describe the specific challenges that a new action frame has to meet. And in the final part, I consider the implications of the good society project for design education, both for curriculum and for a collaborative research effort to move a prototyping process forward.

PART 1: DESIGNERS ENVISION THE FUTURE; UTOPIAN THOUGHT



Fig. 4

(Fig. 4) Utopian thought is a particular kind of proactive thought that is removed from the constraints of the real world. It provides an opportunity to imagine an ideal place that can serve as a beacon towards which to strive. Some utopian visions have been formulated in such detail that we can envision what the home furnishings look like, while others are more abstract, crystallizing urges for a better world in statements that express values rather than pictures of what that world might look like.

Within design there has been a strain of utopian thought that extends at least as far back as the Greeks. The Greek word *utopia* is actually formed from two roots that together mean “no place” suggesting that a utopia is not a place that we can actually experience, while it is obviously a place that we can imagine. (Fig. 5) Sir Thomas More in his book *Utopia* of 1516 described utopia as an island that supports an ideal society. Going back to classical times, however, we see that writers as well as architects have been concerned with what a utopian society or city might look like. As Frank and Fritzie Manual write in their monumental history, *Utopian Thought in the Western World*:

The Greek philosophical utopia was concretely embodied in the architectural design of ideal city plans from the classical through the Hellenistic periods, of which only scattered cursory notices survive, and in experiments projected or actual of which little can be said with certainty.¹



Fig. 5



Fig. 6

22

(Fig. 6) During the Italian Renaissance, the Italian architect Filarete described plans for an ideal Renaissance city or *città ideale* in his *Trattato d'architettura* or *Treatise on Architecture*, while other Renaissance architects also envisioned such cities. The *città ideale* was a formal structure rather than a place full of social life as was More's *Utopia* and others that followed it. (Fig. 7) In the 19th century, there were numerous attempts to create experimental utopias such as the numerous Shaker communities in the United States or Robert Owen's New Harmony, Indiana, which followed them. Though these experiments were relatively short-lived, they actually put into practice new forms of design, both architectural and design on a smaller scale. They were also based on new forms of social organization.



Fig. 7



Fig. 8

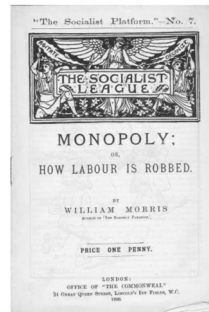
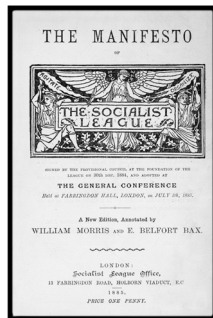


Fig. 9



Fig. 10

(Fig. 8) The greatest of the 19th century visionaries was the Englishman William Morris, a towering figure in the history of design as much for the gusher of poems, essays, letters, and novels that poured forth from his mind as for the beautiful objects he made in almost Britain. He was a member of the Socialist Democratic Federation and a founder of the breakaway Socialists every form available to designers in his day. For some years Morris was deeply engaged in socialist politics in League. In a speech entitled "The Society of the Future," that Morris gave to the Hammersmith (London) branch of the Socialist League in 1887, he referred to "dreams for the future" that "make any a man a Socialist whom sober reason deduced from science and political economy and the selection of the fittest would not move at all."²

(Fig. 9) Morris thought a good society of the future would bring about "the pleasurable exercise of our energies, and the enjoyment of the rest which that exercise or expenditure of energy makes necessary to us."¹³ As a keen student of Marx's and Engels' *Communist Manifesto* and Marx's *Das Kapital*, Morris foresaw an end to political society as well as private property.

(Fig. 10) In his utopian novel, *News from Nowhere*, published three years after his Hammersmith speech, he invented a place that was set in a bucolic past where men and women could live in what we call today "slow time" and enjoy the pleasure of satisfying work and association with others. There is much that is appealing in Morris's utopian vision but it is a romantic vision of the past and not a working model of the future. Nonetheless, Morris is most valuable for the intensity and poetic articulation of his feelings about how society should and could be.⁴



Fig. 11

(Fig. 11) For the utopian architects and designers on the European continent after World War I, Morris was a strong influence as was an event of a very different sort, the Russian Revolution, which began in 1917 and was completed by 1920. Whereas Morris and other visionary thinkers of his day had to inject their idealistic visions into a society that was for the most part resistant to them, the Russian artists, designers, and architects who created new building types, furniture, graphics, textiles, and fashion after the Revolution did so in the belief that they were designing for a new society that had never before existed and would therefore adopt their ideas. Hence, they were free to embody the imagined revolutionary values of this new society in artistic forms that likewise were totally new. Unlike Morris, who valued a way of life associated with the past, the Russian avant-garde was oriented towards a technological future that was, in fact, many years ahead of what could actually be realized.

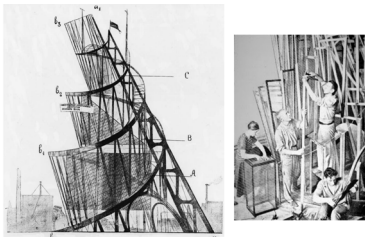


Fig. 12

(Fig. 12) Emblematic of this expansive vision, pursued without immediate concern for its actual realization, was Vladimir Tatlin's *Monument to the Third International*, built in 1920 for the Second World Congress of the Communist International, the arm of the Communist Party that maintained contacts with Communists outside of Russia. Made of wood, Tatlin's monument, which he completed with only a few assistants, was projected to become one of the world's technological wonders. It had four levels, each with a different geometric shape, that housed varied functions and revolved at different speeds from a day to a year. Though never built, the monument remained as an inspirational icon for many years and continues so to this day though without the political expectations that it embodied when Tatlin built it.



Fig. 13

(Fig. 13) After World War I, when artists, designers, and architects in Europe were imagining ways to rebuild a battered continent, the Russian Revolution was an inspiration to the Workers' Council on Art in Berlin and to Theo van Doesburg, founder of the De Stijl movement in the Netherlands. Some members of the Workers' Council on Art like Bruno Taut went on to build Socialist-inspired housing developments such as

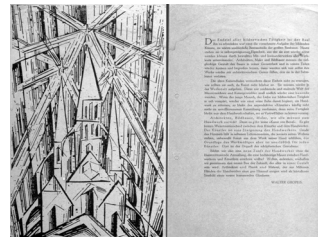


Fig. 14

the Britz housing in Berlin, while in 1919 Walter Gropius became the director of the Bauhaus, an experimental design school in Weimar.⁵ (Fig. 14) For the founding manifesto of the school, Gropius chose the image of a cathedral, which he called the Cathedral of Socialism.⁶ Like William Morris, he envisioned a return to the cooperative work practices of the Middle Ages that characterized the construction of the great European cathedrals. We can be reasonably sure that the cathedral image, created as a woodcut by the artist Lionel Feininger, was a metaphor, perhaps for a good society based on cooperative practices, while at the same time we see that Gropius imagined the Bauhaus itself as a utopian community that was based on curricular organization and social relations that were radical departures from the other schools of applied arts in Germany.

The utopian impulse was marginalized during the 1930s when Adolf Hitler and the Nazi Party controlled Germany and it remained dormant in the early postwar years when European nations were concentrating on rebuilding after the devastation of World War II, (Fig. 15) while some Americans were busily consuming all the new houses, cars, and appliances that postwar industry in the United States could offer. The impulse surged again in the 1960s but took the form primarily of struggles for human rights and environmental justice rather than visions of new societies.



Fig. 15

(Fig. 16) One exception to this tendency was Buckminster Fuller, a brilliant American engineer and inventor. Fuller was the opposite of William Morris. As an engineer, he believed in technology that was rationally and democratically applied and he actually produced a spate of technological inventions, the most widely adopted of which is the geodesic dome. Fuller attracted many adherents to his project of a world resources inventory and his inauguration of a World Design Science Decade. His legacy to designers was to think in large systemic terms unencumbered by the political and social obstacles that might prevent such big thoughts from turning into realized projects.⁷

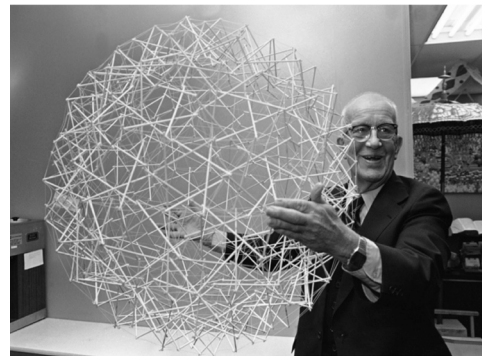


Fig. 16

PART 2: THE DEVELOPMENT OF SPACESHIP EARTH

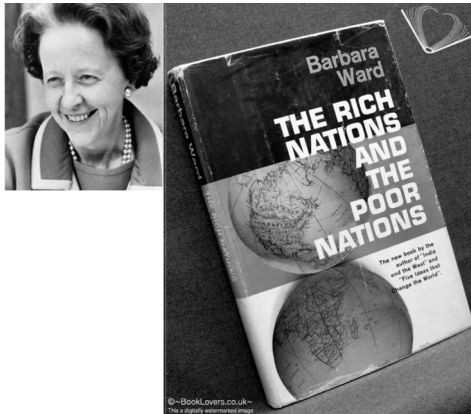


Fig. 17

(Fig. 17) Just as the end of World War I spawned a movement of utopian visionaries who produced designs for worlds or places that were free of political constraints, so did the termination of World War II result in seeds that sprouted in the form of reflections on how the diverse peoples of the world could live together in a world of justice and peace. Among them was the British economist Barbara Ward who began to think about global issues by first considering the problems of what were called in the 1950s and 1960s underdeveloped countries. Her 1962 book *The Rich Nations and the Poor Nations* was an early attempt to connect the problems of these poor nations with the economic power of their wealthier counterparts to consider how changes in the economic policies and practices of wealthy nations could affect policies that would benefit countries in less developed parts of the world. Her book was written at a time when Western Europe was just back on its feet and the United States was still in the midst of an economic boom. One of the great obstacles to global development from Ward's point of view, however, was the Cold War rivalry between the United States, the Soviet Union, and China. Consequently, she envisioned the

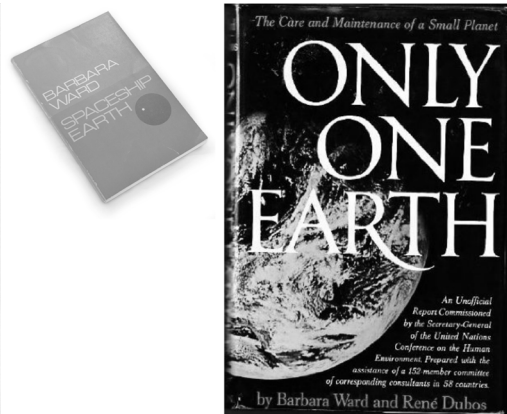


Fig. 18

West rather than the Communist East as a leader in promulgating a just and peaceful world. At the end of the book she wrote:

It is just because the task before us is the positive task of building a peaceful home for the human family that I doubt whether realism or fear is enough to set us to work. We need resources of faith and vision as well.⁸

I should mention here that Barbara Ward was more than likely guided by the work of the Swedish economist Gunnar Myrdal who addressed the disparity between rich and poor nations in his 1956 book, *An International Economy: Problems and Prospects*.

(Fig.18) Ward's 1966 book, *Spaceship Earth*, whose title can be traced back to the late 19th century, was among the first to describe the impact of new global problems such as pollution, urbanization, and resource consumption on what she called the "planetary economy." Ward was realistic in creating her inventory of problems that had a global dimension and she had

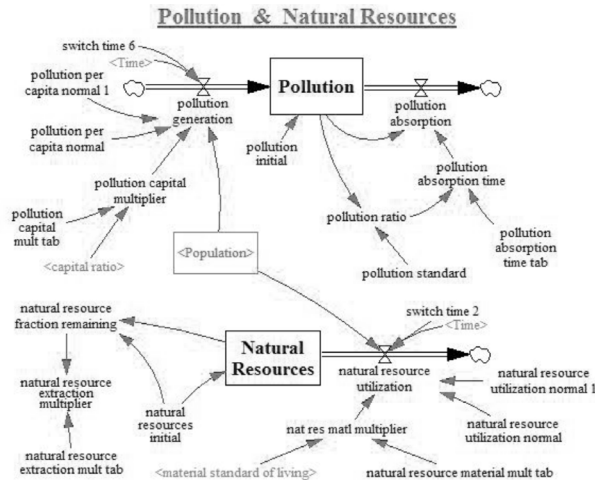


Fig. 19

no recommendations for easy solutions. Nonetheless her book was useful in creating a rudimentary example of a global 'problematique' or problem statement that others would address after her.⁹

Enter the Government of Sweden, which promoted a plan that the United Nations took up for a Conference on the Human Environment in 1972. In the year prior to the conference, Barbara Ward and the French biologist René Dubos, authored a report, *Only One Earth: the Care and Maintenance of a Small Planet*, which was commissioned by Maurice Strong, a Canadian businessman who was the Secretary-General for the conference. It was perhaps the first of a series of ensuing reports on global environmental and social conditions that were prepared under United Nations auspices. Given the theme of the conference, the report emphasized environmental problems but like Ward's previous books, it did so from a global perspective.¹⁰

(Fig. 19) Four years earlier an Italian industrialist, Aurelio Peccei convened a group of international colleagues from different disciplines, who shared a recognition

that the world was heading for a crisis and they created a Project on the Predicament of Mankind. At a conference in Cambridge, Massachusetts in 1970, an MIT professor, Jay Forrester, who had been a pioneer of methods for analyzing technical systems during World War II, presented a model that would enable an analysis of global factors that limit growth. These included population, agricultural production, natural resources, industrial production, and pollution. When completed and published in 1972 the report, titled *Limits to Growth* challenged previous visions in the developed countries of limitless resources and argued that the a series of trade-offs would henceforth be required if the planet were to continue to survive. As the authors wrote

By now it should be clear that all of these trade-offs arise from one simple fact – the earth is finite...When there is plenty of unused arable land, there can be more people and more food per person. When all the land is already used, the trade-off between more people or more food per person becomes a choice between absolutes.¹¹

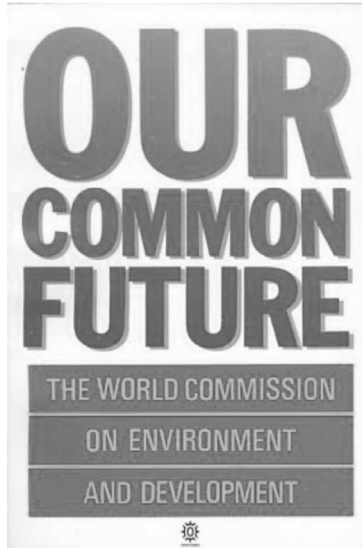
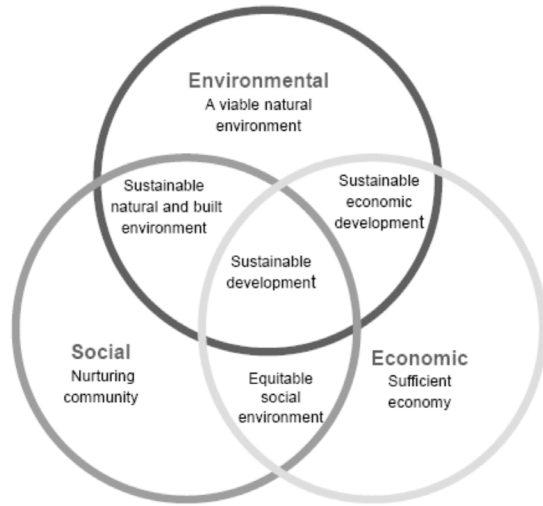


Fig. 20



(Fig. 20) The growing catalogue of problems coupled with the Club of Rome's claim that resources were finite, began to generate a new mindset among a few politicians and scholars who realized that new ways to think about managing the planet were drastically needed. Such concern prompted yet another United Nations project, the World Commission on Environment and Development that was established in 1983. It was intended on the one hand to produce a thorough survey of environmental resources and issues, while also adding a new factor, social-well being, to the definition of *sustainability*.

The now oft repeated definition of sustainability was enunciated in the report's introduction:

Humanity has the ability to make development sustainable – to ensure that it meets the needs of the present without compromising the ability of future generations meet their own needs.¹²

Though its report was filled with helpful analyses of different factors that contributed to the dire situation it recognized— population, industry, energy, food security, urban affairs – the Commission, chaired by Norway's Minister of Environmental Affairs and then Prime Minister Gro Harlem Brundtland, did not make any recommendations that would have seriously challenged the world's most powerful industries. Nor did it confront the idea that growth might have to be limited in order to insure the availability of resources for the future generations that it purported to safeguard.

In the trajectory of United Nations conferences on environmental issues, the Brundtland Commission's work was an outcome of the Stockholm conference in 1972 and an impetus for the United Nations Conference on Environment and Development, also known as the Rio Summit, that was held in Rio de Janeiro twenty years later.



Fig. 21

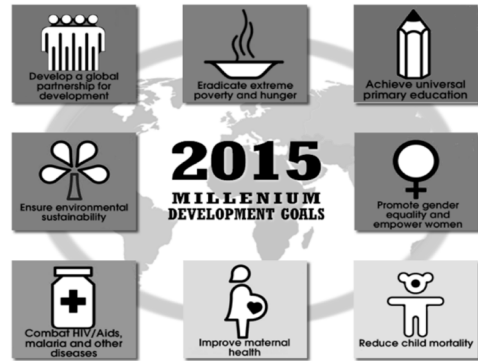


Fig. 22

(Fig. 21) The Rio conference for which Maurice Strong also served as the Secretary-General produced a compelling report, *Agenda 21: The Earth Summit Strategy to Save Our Planet*, replete with optimistic though non-enforceable resolutions for environmental improvement.¹³ One outcome of the conference, the Earth Charter, has codified a set of environmentally and socially sustainable principles yet translates none of them into policies that could result in concrete actions. Consequently, it enunciates a code of conduct that any well-intentioned and reasonable person would agree with but stops short of confronting any obstacles to the massive and necessary environmental and social changes it advocates.¹⁴

By the time of the Rio Summit in 1992, global politics had begun to harden into opposing camps such that subsequent summits on climate change and environmental issues ceased to reach any conclusions that were uniformly endorsed by all the delegates, despite the fact that environmental conditions have worsened considerably. Likewise, neo-liberal policies that the World Bank and the International Monetary Fund have imposed on developing countries have stifled many valuable initiatives and facilitated the entry of large global corporations into countries that should have been given the means to ameliorate their own situations. (Fig. 22) The United Nations continues to hold meetings on the Millennium Development Goals, whose achievement has now been pushed back to 2015, but the U.N. has been unable to garner sufficient support to reach them nor has it shown any capacity to stem the tide of corporate privatization that is spreading around the globe.

PART 3: A NEW ACTION FRAME



Fig. 23

(Fig. 23) The mountain of crises that the world faces today is a clear indication that the action frame that has shaped the world's development for the last six hundred years is no longer adequate to address them. While the frame was in place, many positive results were achieved. The middle class was created and large numbers of people entered it. Models of entrepreneurship were created and these delivered new goods and services that have enriched the lives of millions of people. Diseases have been cured and overall the health of the world population has improved immensely. Within this frame, whose primary actors are nations, and more recently international and transnational entities like the United Nations and global corporations, capitalism has been the dominant economic system, having weathered a brief challenge from the command economies of the Soviet Union and its former Eastern bloc satellites.



Fig. 24

(Fig. 24) The tide has now turned and a new set of conditions calls for a very different action frame that would not only better enable the thousands of small to medium scale initiatives that are challenging the values of the old frame but also provide a new set of global and national institutions to counter the sharp divide between rich and poor individuals and nations that capitalism has fostered. We need to recapture the utopian impulse that was so strongly present in the thought and feelings of such great designers as William Morris, Walter Gropius, and Buckminster Fuller, while also reviving the perspective of spaceship earth that established a clear set of global problems that need to be addressed.

To invent a new action frame is not only a matter of changing values. It is necessary to change strategies well. I would like to mention here eight conditions that call for a new strategy of action on a global scale.

First: Population Growth. More people on the planet require more resources and a different means of distributing them.

Second: More older people who require care and financial support.



Fig. 25



Fig. 26

Third: Climate change.

Fourth: Increased consumption of natural resources.

Fifth: A global financial system that is out of control.

Sixth: An unacceptable gap between the rich and the poor worldwide.

Seven: A reduction of jobs due to new robotic and expert systems technology.

Eight: Fundamentalist religious beliefs that divide the world's peoples
what is to be done?

(Fig. 25) Even in the midst of the current crises, millions of people are actively seeking alternatives to unsustainable lifestyles and institutions. Such projects of the DESIS network are examples of this. Subjects range from food production, to banking, to skills bartering, to altering patterns of land ownership, to new means of transport. Some of these projects are microcosms of what larger sustainable systems might

look like, while others isolate sustainable practices within systems they can't change.

(Fig. 26) The American political scientist Gar Alperovitz has introduced a concept called The Pluralist Commonwealth, by which he means a new system of wealth production made up of diverse components, many of which are already in place. He describes the Commonwealth as a model that "projects the development over time of new ownership institutions including locally anchored worker-owned and other community benefitting firms, on the one hand, and various national wealth-holding, asset-based strategies, on the other. These ultimately would take the place of current elite and corporate ownership of the preponderance of large-scale capital."¹⁵ Alperovitz is one of many people doing research on the "New Economy." Their ideas range from reformist to radical but all agree that the prevailing model of capitalism has failed.¹⁶



Fig. 27

(Fig. 27) Pursuing some of the ideas that have arisen in the "New Economy" movement would lead to a complete rethinking of the money system and its place in the distribution of goods and services. Even a simple analysis will make clear, for example, how much wealth is squandered in the casino sector of the Wall Street economy or else on cleaning up the messes engendered by unsustainable environmental practices. It should be no surprise that various writers on the "New Economy" describe the monetary system as something that is designed, making clear that it is the product of strategic thought and can be changed if there is sufficient rationale.

(Fig. 28) I could go on to discuss other sectors such as food production, health care, or transport where the results of small to medium sized projects could



Fig. 28

lead easily to deeper reflection on how to change large-scale systems that address such issues. What I am calling for is an investigation of the contours that would shape an innovative action frame. Such a frame could help to conceptualize many initiatives for positive change that are currently underway and create an opportunity for prototyping new large-scale systems that might successfully address some of the crises I have outlined above. Once such prototypes have been developed, it is entirely possible that some existing institutions might be willing to try them out.

(Fig. 29) As one example, I can cite the American grocery chain Whole Foods, which is building a new store in Brooklyn, N.Y. with a greenhouse farm on the roof. The farm will produce vegetables that will be sold in the store.



Fig. 29

DESIGN EDUCATION

Today, we often hear the word *design* being used to characterize the thought processes behind the conception and planning of not only manufactured products and graphic communication but also far less tangible entities like corporate organizations, social activities, government ministries, and even systems of laws. In short, design for many people, has come to mean a process of envisioning an activity that leads to a specific outcome that is useful to someone. While this broad definition is confusing for some, it is an opportunity for others to expand what was once an activity limited to market commodities and public communication. Unfortunately, the term *design* has become so attractive that it has been coopted by the very organizations whose aims and purposes ought to be challenged or at least questioned. For example, the annual World Economic Forum in Davos, Switzerland, where heads of state and ministers of finance rub shoulders with corporate CEO's and enterprising billionaires, has formed its own Council on Design & Innovation, while the 2012 meeting of the

Clinton Global Initiative dedicated was dedicated to the theme of Designing for Impact. The problem with such organizations adopting design strategies to address social problems is that they create false models of activist design whereas they neglect to consider their own activities as complicit in the problems they attempt to address. Therefore a need exists to create new kinds of research centers that can foster proactive design by adopting radical strategies to rethink the consequences of the prevailing action frame and the potential of a new one. If Google can allocate a few billion dollars to researchers to create a new pair of internet goggles for a privileged few, then it should be possible to find enough money to support research on new models of social practice that would affect the entire world.¹⁷ The network of design schools within Cumulus could be the site of a noble experiment to see whether a group of project-oriented research centers distributed throughout Cumulus could generate a new social vision for the 21st century. A precedent for such an experiment would be the growing number of DESIS labs that already exists within the association.¹⁸

To address the question of why a global network of design schools would be an appropriate place to launch a sustained reflection on a new global action frame, I offer an answer with four parts. First: design is a propositional activity with no preconceived outcomes so that design thought can proceed unhampered by disciplinary rules that restrict its content. Second: designers are good at analyzing situations and extracting from them projects that can lead to improvements. Third: designers are skilled at integrating the knowledge of others as numerous examples of managing multidisciplinary or even transdisciplinary design teams shows. Fourth: design is changing radically as it expands to include many new forms of activity.

(Fig. 30) The Good Society as a project could also provide a framework for teaching some of the new forms of design. If students were simultaneously working to understand the characteristics of a good society, while also learning how to design something, there could be a valuable confluence of methodology and values. Last month Virginia Tassinari and I found this to be true in a workshop on the Good Society that we led at the Milan Politecnico. Students were eager to work on a project that they perceived to be a valuable social contribution. Our workshop was conducted without a research base but students could benefit from the research of various centers within the Cumulus network that would be set up to consider aspects of a new action frame. They could also be part of a feedback loop that would enable them to contribute to the research as they learn to be designers.

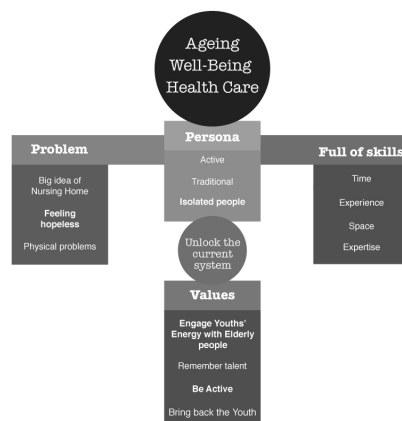


Fig. 30



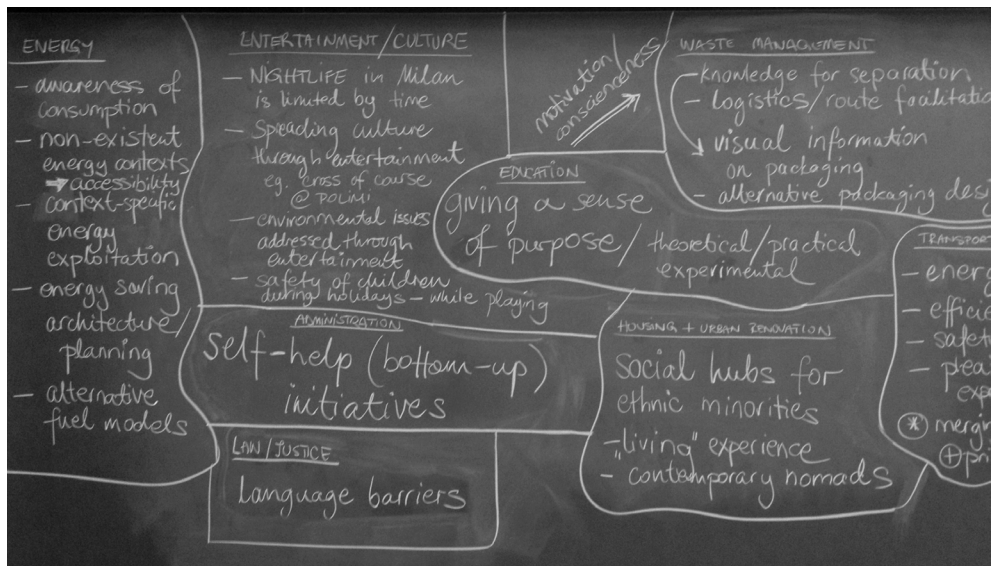
Fig. 31

(Fig. 31) Consequently, the challenge to design educators who must prepare students for new opportunities is a great one, particularly when clear paths to success do not exist. A product designer is trained to envision the range of devices that he or she is likely to design just as a student of visual communications can be confident that a knowledge of typography, layout, and perhaps digital media will

prepare him or her for a range of opportunities whose boundaries are relatively stabilized. But a student trained to design services, organizations, or even protocol systems for social processes, despite his or her training, cannot predict what kinds of projects might present themselves or, in fact, how they will provide a livelihood for the designer.

(Fig. 32) Thus, design education is in a situation today that calls for bold new initiatives. On the one hand, many of the traditional activities for which a design student was traditionally trained have disappeared or at least have vanished from the high wage industrialized societies and or have been outsourced to countries where designers with comparable skills will work for a fraction of the cost. Or else, the activities themselves have been automated and human skills are no longer required, even if those skills were once a guarantee of better quality than can be achieved with automated services. The paradox of these declining markets for traditionally trained designers is that the situations that call out for new design interventions have been multiplying at an accelerating rate.

Fig. 32



CONCLUSION: FROM UTOPIA AND SPACESHIP EARTH TO THE GOOD SOCIETY



Fig. 33

(Fig. 33) As I have demonstrated, the history of design is replete with utopian projects. I argued that the value of such projects has been to provide a space for aspirations that have no other locus for expression. Thus, the città ideale was a space to visualize architectural ideals that could not be represented elsewhere. Likewise, Tatlin's Tower expressed in structural form his hopes for a new revolutionary society. I contrasted such projects with others that had ambitious agendas rooted in the real

world, characterized holistically by images such as spaceship earth. The Good Society project moves beyond the second category. Though animated by utopian ideals, it addresses real world situations and could be realized by real world actions but unlike the image of spaceship earth, which is one of a closed entity, the good society is open and is being shaped by thousands of people and not just a group of experts who are piloting the spaceship.

NOTES

¹ Frank E. Manuel and Fritzie P. Manuel, *Utopian Thought in the Western World* (Cambridge, MA: The Belknap Press of Harvard University Press, 1979), 65.

² William Morris, "The Society of the Future," in *Political Writings of William Morris*, edited and with an Introduction by A.L. Morton (New York: International Publishers, 1973), 189.

³ *Ibid.*, 191.

⁴ A concise account of Morris's full career as an artist, designer, author, and politician is Paul Thompson's *The Work of William Morris*, new edition (Oxford and New York: Oxford University Press, 1991, c. 1967). Morris's political career is addressed in E.P. Thompson, *William Morris: Romantic to Revolutionary* (London: Merlin Press, 1977).

⁵ I have discussed these and other utopian avant-garde movements in my essay "The Utopian Impulse," in the exhibition catalogue edited by Vivien Greene, *Utopia: Matters: From Brotherhoods to Bauhaus* (New York: Guggenheim Museum Publications, 2010), 24–32.

⁶ Walter Gropius, *Programme of the Staatliches Bauhaus in Weimar*, in Ulrich Conrads, ed. *Programs and Manifestoes on 20th – Century Architecture*. Translated by Michael Bullock (Cambridge, MA: The MIT Press, 1975, c. 1970), 49–53.

⁷ Fuller's writings are numerous. Among them are *Nine Chains to the Moon* (Garden City, N.Y.: Anchor Books, 1971, c. 1938, 1963), *Operating Manual for Spaceship Earth* (Carbondale: Southern Illinois University Press, 1969), *Utopia or Oblivion: The Prospects for Humanity* (Toronto, New York, London: Bantam Books, 1969), and *No More Secondhand God and Other Writings* (Garden City, N.Y.: Anchor Books, 1971, c. 1963).

⁸ Barbara Ward, *The Rich Nations and the Poor Nations* (New York: W.W. Norton, 1962), 154.

⁹ Barbara Ward, *Spaceship Earth* (New York: Columbia University Press, 1966).

¹⁰ Barbara Ward and René Dubos, *Only One Earth: The Care and Maintenance of a Small Planet* (New York: W.W. Norton & Co, 1972).

¹¹ Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens III, *The Limits to Growth*, 2nd ed. revised (New York: New American Library, 1974, c. 1972), 93–94. See also Donella Meadows, Jørgen Randers, and Dennis Meadows, *The Limits to Growth: The 30-Year Update* (White River Junction, VT: Chelsea Green Publishing Company, 2004). Other reports to the Club of Rome include Mihajlo Mesarovic and Eduard Pestel, *Mankind at the Turning Point: The Second Report to the Club of Rome* (New York: New American Library, 1974) and Ervin Laszlo, *Goals for Mankind: A Report to the Club of Rome on the New Horizons of Global Community* (New York: Dutton, 1977). Aurelio Peccei has expressed his own view of the future in *One Hundred Pages for the Future: Reflections of the President of the Club of Rome* (New York: New American Library, 1981).

¹² "From One Earth to One World: An overview by the World Commission on Environment and Development," in *Our Common Future: World Commission on Environment and Development* (Oxford and New York: Oxford University Press, 1987), 8.

¹³ Daniel Sitarz, ed. (*Agenda 21: The Earth Summit Strategy to Save Our Planet*. Introduction by U.S. Senator Paul Simon (Boulder: Earth Press, 1993).

¹⁴ The Earth Charter can be downloaded in any of multiple languages on the website of The Earth Charter Initiative, <http://www.earthcharterinaction.org>. Accessed May 29, 2013.

¹⁵ Gar Alperovitz, *America Beyond Capitalism: Reclaiming Our Wealth, Our Liberty, & Our Democracy*, 2nd ed. (Takoma Park MD: Democracy Collaborative Press and Boston: Dollars and Sense, 2011, c. 2005), 71.

¹⁶ There is a rich literature on the "New Economy." Books on the subject include James Robertson, *Future Wealth: A New Economics for the 21st Century* (London and New York: Cassell Publishers, 1990), Lester R. Brown, *Eco-Economy: Building an Economy for the Earth* (New York: W.W. Norton, 2001), Peter G. Brown and Geoffrey Garver with Keith Helmuth, Robert Howell, and Steve Szeghi, *Right Relationship: Building a Whole Earth Economy*. Foreword by Thomas E. Lovejoy (San Francisco: Berrett-Koehler Publishers, 2009), David C. Korten, *Agenda for a New Economy: From Phantom Wealth to Real Wealth*, 2nd ed. (San Francisco: Berrett-Koehler Publishers, 2010), and James Gustave Speth, *America the Possible: Manifesto for a New Economy* (New Haven and London: Yale University Press, 2012).

¹⁷ See Brad Stone, "Inside the Moonshot Factory" *Bloomberg Business Week* (May 27–June 2, 2013), 56–61. The article describes the activities of Google's research lab known as Google X.

¹⁸ Information on the DESIS Network, can be found on the organization's website <http://www.desis-work.org>.

SUZANA DIAS

[ID+] Research Institute for Design, Media and Culture
Polytechnic Institute of Cávado and Ave (IPCA)
Portugal
cdias@ipca.pt

SUSANA JORGE

Research Institute in Art, Design and Society da
FBAUP (i2ADS)
Polytechnic Institute of Cávado and Ave (IPCA)
sjorge@ipca.pt

3 EXPLORING THE INTERDISCIPLINARY PROCESS IN DESIGN EDUCATION*

39

* PAPER ORIGINALLY PUBLISHED IN: CHOVA, L. GOMES;
MARTÍNEZ, A. LÓPEZ; I. TORRES, CANDEL (EDS.) – ICERI2014: 7TH
INTERNATIONAL CONFERENCE OF EDUCATION, RESEARCH AND
INNOVATION. PROCEEDINGS. SEVILLE: IATED ACADEMY, 2014.
ISBN: 978-84-617-2484-0. P. 1590-1595

ABSTRACT

The work presented here follows an ongoing research that aims to analyze methodological practices to be applied in Design Education. *A reflection about methodological strategies in Design Education and the function of drawing in Design* represents the beginning of this study. Then, we developed an *interdisciplinary pedagogical experience* with the Graphic Design 1st grade students from our institution (IPCA). In the current academic year, 2013/2014, we continue to evolve this project, introducing changes in the initial proposal. Major alterations focused on the aspects that could be strengthened in terms of interdisciplinarity. In this article, the authors describe those changes and discuss the outcomes of the novel proposal.

As we have already reported, this investigation follows a reflection about working methods to be adopted in Design Education. This is in accordance with other previously published works that purpose

the enlargement of Design into new knowledge fields such as *Experience or Service Design*, changing not only the role of the graphic designer, but also the skills required to be a professional designer (Alain Findelli, 2001), (Brian Lawson, 2006), (Ciampa-Brewer, 2010).

Furthermore, concepts such as *cooperation or multidisciplinary design*, amongst others, have been frequently debated as design teaching strategies (Heller and Talarico, 2011, pp. 82-85). These educational approaches also have an impact on our research. The analysis of all these authors' contributions together with a reflection on our teaching practice allowed us to propose an improved interdisciplinary intervention.

Keywords: Interdisciplinary practices; Design Education; Drawing Education.

INTRODUCTION

This project began from a reflection about methodological strategies in Design Education¹. As teachers in the area, we have been studying this subject in order to explore the established educational content and promote the *teaching/learning process*, with a view to *analytical construction of knowledge* in the Design field.

Throughout the process of our work, we have studied the contribution of several authors that point out the problem of the action field of Design nowadays. For many authors, like Findelli (2001), Lawson (2006), or Ciampa-Brewer (2010), the expansion of Design into new knowledge fields, such as *Experience or Service Design*, changing not only the role of the graphic designer, but also the skills required to be a professional designer (Ciampa-Brewer, 2010).

Victor Margolin (2014) also underlines this broad field of Design and its expansion to other areas (p. 77) that go beyond the more traditional notion of this discipline, discussing the importance of sustainability, in terms of creating an "*environmental and social well-being*", as fundamental in designer's activity (idem, pp. 77-79). Thus, states the importance of conceive curricular structures adjusted to this reality (idem, p. 137): "*Schools of Design, as indeed all the others, should do more to teach young people to invent their own economic identities. Capabilities and valences have to be dissociated from existing jobs and taught as creative tools. Even more important is to teach young people to study the social environment and to plan strategies about how their creations can improve it.*" (p. 143).

There are thus a growing number of interventions about the problem of design education, their curricular structures, contents and forms of action in academic context that can better prepare students to face all these challenges in Design (Davis, 2008). These changes can also be visible in the way that professionals designer's work and in the way that

studio's prepare work teams and theirs project's². It's important to refer that, beyond the discussion about the emerging dimensions of Design, has also been relevant the debate about methodological strategies to adopt in design teaching. Concepts such as *cooperation* or *multidisciplinary* design, amongst others, have been frequently discussed as design teaching strategies (Heller and Talarico, 2011, pp. 82-85), which is in accordance with the professional context of the designer, where a growing interdisciplinary practice occurs (Ciampa-Brewer, 2010).

Thus, we also analyzed several authors who consistently reaffirm the importance of thinking "*everything in relation*"³ and therefore, suggest a proper orientation of the pedagogical contents, more adjusted to the demands of the contemporary context and the practice of design. This has been an issue discussed by Meredith Davis (2008). The author states that design education must integrates several subjects and disciplines, understanding and studying the problems in a whole complex of relations and not in isolated way (Davis, 2008). As an example, Meredith refers a project developed by second grade North Carolina Graphic Designers students⁴ as an example, which focused mainly "*people, settings and scenarios*" (Davis, 2008, p. 5). On this project there was not asked to the student the realization of the final object – a map, a poster or a movie, as random containers in which the designers spill random content – frequent method on the traditional design teaching. On the contrary, the objective of the proposal given by the teachers was, according to Meredith, firstly to teach the possible relationships between certain types of information and particular representation strategies (idem, p. 6).

Another case is referred by Victor Margolin (2014). The author does not indicate a specific proposal, but the "philosophy" adopted by *Archeworks – Design alternative school founded in Chicago in 1994*⁵. That institution develops and applies a *collaborative methodology* that goes beyond disciplinary boundaries (idem, p. 65). In that case, "*interdisciplinarity* is

achieved through the collaborative process" (idem, p. 66). As indicated by the School itself: *"In keeping with our philosophy of experiential learning, facilitated peer-to-peer sessions foster imaginative thinking and critical dialogue; generate proposals, prototypes and working models; and develop new models of cross-disciplinary practice and civic innovation. These advanced forums aim to integrate perspectives from diverse disciplines and fields of practice—which we believe is critical for not only seeding community-driven solutions, but generating visionary responses to society's most complex challenges"*⁶. The meaning of this way of work complies the intentions and purposes of the projects they are developing – oriented to *"social design"* (Margolin, 2014, p. 65).

These examples reveal the importance of a *collaborative model* that can become an alternative to the established traditional models, providing a different approach in the *teaching/learning process* and in the academic projects. Interested us to reflect about those methodologies that promotes collaboration in educational context. However, our purpose was also to better understand the meaning of an interdisciplinary application in our teaching context – with its own specificities and practices already defined – taking into account the problems that we had studied and that interested us to discuss, but also the goals, the importance and the purpose of such a project applied in our school and between the Curricular Units that we teach.

THE MEANING OF THE INTERDISCIPLINARITY IN EDUCATIONAL CONTEXT

In the work developed by Diana Rhoten, Veronica Boix Mansilla, Marc Chun, and Veronica T. Klein (2006), *interdisciplinary education* is defined as a way to *"identify, evaluate, and integrate information, (...) from two or more disciplines (...) to advance students' capacity to understand issues, address problems, appraise explanations, and create new approaches and solutions that extend beyond the scope of a*

single discipline or area of instruction" (idem, p. 3). The authors refer the importance of integrating subjects *across disciplines* for the achievement of certain goals, and that *interdisciplinary program education* allows, for example, to solve a problem that could not be solved only by disciplinary approach (*ibidem*). They also sustains that an interdisciplinary program succeeds, when *"in addition to focusing on critical thinking, problem solving, and analytic skills expected of most liberal arts programs – must develop student capacities to integrate or synthesize disciplinary knowledge and modes of thinking"* (*ibidem*).

According to Mark Breitenberg (2006) is recognized the value of collaborative work between professional designers. However, when the subject is pedagogy and education, the author questions if the teaching design approach should maintain disciplinary limits *"that offer depth of field and expertise"* (*ibidem*); or if the collaborative attitude should be totally assumed: *"producing designers who are able to synthesize different kinds of knowledge and skills and work well in collaborative teams"* (*ibidem*). In his study, the author states that is essential to a successful interdisciplinary education the existence of a *"strong discipline-based programs"* that gives specific competences, before the development of *interdisciplinary projects* (*ibidem*).

So, besides the importance of an interdisciplinary curriculum, another question still remains: how can this curriculum or pedagogy be articulated?

For Tara Winters (2009) exists *"a variety of approaches to interdisciplinary art and design education"* (p. 1). From the concept *"forms of interdiscipline"* de W.J.T. Mitchell, she analyzes aspects of interdisciplinarity for educational purposes. In her reflection considers advantageous the application of the concept *"forms of interdiscipline"* for interdisciplinary education in art and design (idem, p. 8), since interdisciplinarity can be understood as a *"(...) challenge to established discipline norms. Overlaps and moments of contact are contextualised in relation to distinct features of a discipline providing an essential grounding for*

asking critical questions about a practice" (*ibidem*). On the other hand, says the author, proposing an interdisciplinary process to the students, it's possible to emphasize the notion that knowledge is always under review and there are no closed limits on a discipline (*ibidem*). In fact, this break of the *discipline continuity* becomes positive and appears to be, as emphasized by the author: *"(...) the sort of critical encounter that the developing research-led teaching and learning culture in art and design seeks to engage in"* (*idem*, p. 9).

All these issues were certainly considered in our reflection which led us to the realization of an interdisciplinary pedagogical experience. The initial proposal took place in the academic year of 2012/2013. A novel proposed occurred in the following year.

We understand that the implementation of this project, although only involving the two Curricular Units that we teach, allow students to analyze the subjects and solve certain problems - using another methodological approach that promote the continuous dialogue and integration between the subjects that were being placed in debate.

THE DEVELOPED INTERDISCIPLINARY PROCESS THE INITIAL PROPOSAL

The interdisciplinary project that we developed, as the main goal to create a coordinated exercise between the two Curricular Units that we teach: "Drawing" and "Aesthetic and Design Theory" (recently the name of the Curricular Unit "Aesthetic and Design Theory" has changed to "History and Design Theory"). As a starting point, we selected an object – the scissor, to allow the resolution of design issues through a consistent and dynamic experience and in an integrated way between the two disciplines. In this interdisciplinary project was involved about sixty students (total), from the 1st grade of the Graphic Design course from our institution (EST-IPCA). In our School, the students are divided

into classes: in this situation, three classes in "Drawing" and two classes in "History and Design Theory".

Although the problems also had a specific approach in each Curricular Unit, they were created and analyzed in a conjoint way, promoting the 'transfer' of knowledge obtained in one stage of the study, to solve problems face on another discipline.

Since the beginning of this project, we always wanted to establish a working base to be developed. With this first pedagogical experience we concluded that it would be important the inclusion of other Curricular Units in the project; the participating of students from other courses; the selection of other types of objects that, likewise, could provide their exploration through several aspects and problems of the design; and also a questionnaire, allowing students to integrate their views and ambitions about the project itself.

Still, it was already possible, in the first phase of the work, to perceive the student's feedback. They found positive the presence of the same object of study in both Curricular Units, because they could study the proposed problems with a broader and deeper view of the subject. They also found significant the interaction with other people and the professional users of scissors.

Although the outcomes achieved, we understand that it would be important to provide the development of other steps in the project and, in particular, expand some methods of drawing, exploring graphical strategies to present some information about the object in question. For this purpose, we consider the importance of drawing in the design investigation process (Cross, 2007), and also, as Jamie Hobson states, the analytical and thinking abilities that drawing can provide in the design process (1997).

THE NOVEL PROPOSAL

In the second part of the project, prepared in the academic year 2013/2014, the selected piece remained the scissor. This piece, very versatile, was the starting point to study the problem "What is design?" "Who is the designer?". Through direct contact with various professionals, users and experts of the object, they collected important information about the use of the object and its function through interviews and image and sound registration. These elements were crucial to the continuity of the project.

In the Drawing Curricular Unit, the piece was initially studied in its shape, scale and proportions thus developing the *observation, analysis and synthesis ability*, similar to what had been worked in the previous year. At that time, the students also explore a "*strange and new relationship*" between the object and the hand, using the "*forks-hands*" Munari's (1981, p. 330) idea as a reference. In this case, the drawing was applied as a tool to explore new ideas and transform the function of the object. By sketching, the students explored those new relationships between the hand and the scissor, giving the object different positions which are usually associated to other object's pieces and characteristics. So an investigation exercise was done by using this method which simultaneously allowed the experimental and creative process through drawing.

In this second part, the knowledge gained about the proper use of scissors, their functionality, characteristics, or even the color of the object, was used to draw and explore a process, not only the exercise of analytical representation, or the diagrammatic drawing, but instead a graphical drawing with a clear set of instructions. So, the main goal was to "*draw a process*", a "*visual narrative*", explaining the correct and ergonomics use of a particular scissor.

New challenges were taken, and it was important to study how to prepare the information for *showing* a process, because: "*Drawing a process requires that*

enough information be given to explain things well, yet not so much that the viewer loses interest in the instructions or gets confused. Explaining a process visually rather than with words overcomes any language barriers. (...) Yet for this sort of graphical drawing to work, it has to be communicative" (Sherman, 2014, p. 84). This exercise also allowed to apply in a more profound way all the study developed in the "History and Design Theory" Curricular Unit, about the *history, symbolism, evolution, shape, materials, texture, and ergonomics* of the object; and also emphasized the importance of drawing in design.

CONCLUDING REMARKS

The realization of this project allowed us to study the possibilities of interdisciplinary intervention and how we can create integration between programmatic contents of established Curricular Units. The importance to exceed disciplinary boundaries (Winters, 2009), can contribute to a more "*collaborative attitude*" in work: either between teachers and between the students; or either in the way the learning process is developed: allowing students to understanding the possible relationships between certain types of information (Davis, 2008, p. 6).

The simple fact that the disciplinary content is not approached in an isolated way, but on the contrary developing connections between working themes, being integrated in a project, can be motivating in the *teaching/learning process*. We felt that the work team, the share of experiences, makes the process of work much richer, but also promote a better understanding of the subjects in analysis. Like Mark Breitenberg (2006) says: "*interdisciplinary design projects can be exciting and rewarding experiences for our students, offering new ways of thinking and the potential to produce innovative outcomes*". However, points the author, there are some important issues that need to be considered to establish successful interdisciplinary projects in Design Education (*ibidem*).

We realize that the proposed interdisciplinary experience allowed our students to study the design problems in a more profound way. We also understand that this process allows them to feel *more involved*, which was relevant to the investigation and to achieve the proposed goals. We intend to make an exhibition with the student's work and also develop this interdisciplinary project in the future.

THANK YOU NOTES

The authors are grateful to all students that participated in this study: the 1st grade Graphical Design students (daily and after-work regime) from the Polytechnic Institute of Cávado and Ave (IPCA), in the academic year 2012/2013 and 2013/2014. They also thank the Design Department of Technology School (EST) of IPCA.

REFERENCES

- AIGA & Adobe. Designer of 2015 Trends. [online]. Available at: <http://www.aiga.org/designer-of-2015-trends/> [Accessed on April 16th, 2012].
- Bradshaw, M., (1999). Drawing from visual thinking, [online]. Available at: <http://www.lboro.ac.uk/departments/sota/tracey/journal/thin/bradshaw.html> [Accessed on October 12th, 2011].
- Bradshaw, M., (2004). Research study drawing from visual thinking. In *Enhancing curricula: exploring effective curriculum practices in art, design and communication in higher education*, pp. 102–127. [online]. Available at: http://www.arts.ac.uk/docs/citad_2002bradshaw.pdf [Accessed on February 3th, 2012].
- Breitenberg, M., (2006). Education by Design: Interdisciplinary Innovation. [online]. Available at: http://www.icsid.org/news/year/2006_news/articles116.htm [Accessed on January 15th, 2013].
- Ciampa-Brewer, R., (2010). Improving Graphic Design Education to Meet the Changing Role of a Designer, [online]. Available at: http://ciampacreative.com/papers/R.Ciampa_ImprovingGDEducation.pdf [Accessed on September 8th, 2012].
- Cross, N., (2007). *Designerly Ways of Knowing*, Birkhäuser, Basel, Switzerland.
- Cué, P., (2006). Foreword, In Olpe, Peter, *Drawing as Design process, Courses, Themes and Projects at the Basel School of Design*, (2^o ed.) Verlag Niggli AG.
- Davis, M., (2008). April, Toto, I've got a feeling we're not in Kansas anymore... AIGA Boston Presentation. [online]. Available at: http://www.aiga.org/resources/content/4/8/5/7/documents/davis_keynote_paper_and_images.pdf [Accessed on December 10th, 2011].
- Dias, S.; Jorge, S. (2013). "Contribution towards a Reflection about Methodological Strategies in Design Education and the Function of Drawing in Design". In *The International Journal of Design Education*, volume 7, issue 2, pp. 21–28. ISSN: 2325–128X (print), 2325–1298 (online) Available at: <http://ijge.cgpublisher.com/product/pub.235/prod.47>
- Fava, M., (2011). What is the role of observational drawing in contemporary art & design curricula?. In *Graphicacy & Modelling* Norman, E. & Seery, N. (Eds). Loughborough: IDATER (pp. 129–141). [online]. Available at: http://www.academia.edu/421005/What_is_the_role_of_observational_drawing_in_contemporary_art_and_design_curricula [Accessed on September 8th, 2012].
- Findell, A., (2001). Rethinking Design Education for the 21st Century: Theoretical, Methodological, and Ethical Discussion (pp. 5–17). *Design Issues*, Volume 17, Number 1 Winter 2001. MIT press. [online]. Available at: <http://www.mitpressjournals.org/doi/abs/10.1162/07479360152103796?journalCode=desi> [Accessed on June, 06th, 2012].
- Heller, S.; Talarico, L., (2011). An education manifesto for Icograda. In *Icograda Design Education Manifesto 2011* (pp. 82–85). [online]. Available at: http://www.toolkit.icograda.org/database/rte/files/PR_IEN_Manifesto2011_webres.pdf [Accessed on December 27th, 2012].
- Hobson, J., (1997). The End of The Line. In *Eye Magazine*, n° 25. [online]. Available at: <http://www.eyemagazine.com/opinion.php?id=25&oid=81> [Accessed on November 11th, 2011].
- Jorge, S; Dias, S. (2014). "Teaching Drawing: an Interdisciplinary Pedagogical Experience in a Graphic Design Course" in *INTED 8th International Technology, Education and Development Conference, Conference Proceedings*, Edited By L. Gómez Chova, A. López Martínez, I. Candel Torres IATED Academy, ISBN: 978–84–616–8412–0, ISSN: 2340–1079.
- Lawson, Bryan (2006) *How Designers Think: The Design Process Demystified*. Elsevier. Inglaterra. 4^oed.
- Margolin, V., (2014). *Design e Risco de Mudança*, Editora Verso da História, Esad.
- Moholy-Nagy, L., (1969). *Vision in motion*. Chicago, Paul Theobald and Company.
- Munari, B., (1981). *Das coisas nascem coisas*. Lisboa, Edições 70.
- Norman, D., (2010). Why Design Education Must Change. [online]. Available at: http://www.core77.com/blog/columns/why_design_education_must_change_17993.asp [Accessed on December 12th, 2011].
- Norman, D., (2011). Design Education: Brilliance without substance. [online]. Available at: http://www.core77.com/blog/columns/design_education_brilliance_without_substance_20364.asp [Accessed on January 17th, 2011].
- Olpe, P., (2006). *Drawing as Design process, Courses, Themes and Projects at the Basel School of Design*, (2^o ed.) Verlag Niggli AG.
- Poggenpohl, S. (ed.), (2009). *Design integration: Research and collaboration intellect*. The University of Chicago Press.
- Ricard, A., (2008). *Conversando con estudiantes de diseño*. Barcelona: GG Diseño (pp. 67–70).
- Rhoten, D.; Boix-Mansilla, V.; Chun, M.; Klein, J. T., (2006). *Interdisciplinary Education at Liberal Arts Institutions*, Teagle Foundation White Paper, [online]. Available at: <http://info.ncsu.edu/strategic-planning/files/2010/10/2006ssrcwhitepaper.pdf> [Accessed on September 10th, 2012].
- Sherman, W., (2014). *Playing with Sketches. 50 creative exercises for designers and artists*, Rockport Publishers.
- Vasconcelos, M. C.; Elias, H. C. "O "Campo Expandido" do desenho e suas práticas criativas [online]. Available at: <http://recil.grupolusofona.pt/xmlui/handle/10437/2685> [Accessed on November 10th, 2013].
- Winters, T., (2009). *Interdisciplinarity and Design Education*, [online]. Available at: <http://www.swinburne.edu.au/lib/ir/onlineconferences/cumulus/Winters.pdf> [Accessed on September 15th, 2012].

CLIVE DILNOT

Professor of Design Studies, Parsons School
of Design (2002–2017)

New York, USA

dilnot.clives@gmail.com

4 IS THERE AN ETHICAL ROLE FOR THE HISTORY OF DESIGN? REDEEMING THROUGH HISTORY THE POSSIBILITY OF A HUMANE WORLD*

49

*PAPER ORIGINALLY PUBLISHED IN: BARBOSA, HELENA; CALVERA, ANNA (COORD.) – 9TH INTERNATIONAL CONFERENCE OF ICDHS – INTERNATIONAL COMMITTEE FOR DESIGN HISTORY & DESIGN STUDIES – "TRADITION, TRANSITION, TRAJECTORIES: MAJOR OR MINOR INFLUENCES?"; PROCEEDINGS. AVEIRO: UNIVERSIDADE AVEIRO, 2014. ISBN 978-972-789-421-5. P. 57–80.

What follows is not the abstract or even the basis of the talk that I will give in Aveiro so much as a sketching out, in the form of an extended working paper, of the ethical basis from which I would like to try to think about the meaning of doing and thinking about the history of design today. The talk itself will try to ground these abstractions in some concrete exemplars. But in the light of where we are in the world today, a preliminary understanding the ethical and political position of doing work in design, whether as history or practice (and these two things should not be separated) is essential. Such an understanding cannot not but be also philosophical, all the more so that the prime requirement here is to think the linkage between the characteristics and capabilities of design and the possibility of redeeming the world in a humane direction: a project now essential to the question of how this century is survivable without human and ecological catastrophe.

I

'The task to be accomplished is not the conservation of the past, but the redemption of the hopes contained in it.' This injunction, which comes from the introduction to Theodor Adorno and Max Horkheimer's *Dialectic of Enlightenment*,¹ succinctly defines, for our time, the primary task of historical work. Today, the job is not exposé, in the manner of 40 years ago, when the past was mined ideologically for its complicity in serving power, nor is it "making the case" for (professional) design in the way that, from Pevsner through to early design history, was thought to be the major job of writers on design. As the last few years should have made abundantly clear, today we are in a very different world indeed. The complacencies (as well as the hopes) of the modern era have vanished. Economically, we are no longer "in" industrialization, which means we are no longer in the world in which the particular nature of the industrial technology and the forms of economy that emerged across the C19th and C20th demanded design in the

particular forms we still know it by. Even if these forms still echo in our culture, particularly institutionally (—as ever the 'superstructure' lags behind the 'base') ours is *essentially*, which means structurally a very different world.

The economic, but not only economic, implications of the shift from industrial to financial capitalism² — few of which appear to be beneficial for the majority, and many of which are deeply inimical to overall well-being—are what we will have to contend with across the next decades. Almost none of these implications objectively lend themselves to the creation of a more humane world. Indeed the opposite appears to be the case. A paradox of our current history—yet it is only apparently a paradox—is thus that today we find ourselves in a world in some ways closer to that which Adorno and Horkheimer wrote out of than at any time since *Dialectic of Enlightenment* was drafted. In the preface they write of drafting that text 'when the end of Nazi terror was already in sight.' Today, 70 years later, we are witnessing a rise of social attitudes and political parties which, if not yet pointing to the levels of the that terror, give the lie to any notions of Europe and the West as a whole as somehow a haven of intrinsically "civilized" attitudes. The return to levels of inequality not seen since before WWI, especially in the Anglo-Saxon countries but more generally as a world-wide phenomenon, not only feeds these attitudes but points as well to the increasing fragility of the social and political compacts that hold together (but only just) the modern nation state. Underneath both developments, as we know, is the still greater violence of a global economic system that is all too evidently set on course towards ecological and social catastrophe. Taken together these trajectories demand the urgent recovery of all of that is capable of at once acting as a resource against this tendency and of helping us build bridges to a putative better world.

In this context we might think that Europe—the source, after all, of most the world's barbarity over the last 100 years—would feel a special responsibility (in this year of all years) towards the ease with which from what

was the day before the 'height of civilization' there can be created a hell on earth. From August 1914 after all the catastrophe of Europe's violent century begins.³

But no such responsibility is evident—and not only (if majorly) from Europe's leaders. Illusions fostered by the apparently inexhaustible richness of consumption still succeed in inducing a wholesale focus on the moment that is inimical to serious reflection and to the formation of policies and initiatives remotely adequate to dealing with the scale of threats we face. Self-induced blindness to what is socially developing extends into every professional field. Design does not escape this charge. Its defenses, now as always, are two-fold: that it inhabits its own field, distinct even from the economy on which it is generally dependent and which it serves; and that it is in any case inherently virtuous. The quantum of truth that both these contain obscures the fact that neither can be *simply* maintained.

For the first, the illusions of an absolute distinction in practice induced by intellectual and professional divisions of labour do not withstand scrutiny. Fragmentation and specialization of practice and thought is not a 'natural' product of logic but of economic relations.⁴ Design (in the capitalized sense of the word) after all owes its professional and modern phenomenal existence to economics. Its *relative* autonomy is as planned and secured as any other moment of the processes of production and consumption. Moreover, reactive to the core, design autonomy takes its cue from, and is obedient to, what determines it in subaltern position: it self reduces the practices of design to what, at any moment, dominant interests require of them.⁵

In any case, and today perhaps more importantly, the substantive content of what design "does" and what it "knows," is as much obscured as it is clarified by focusing on its autonomy. What the defense of design as an activity unto itself misses is the question of how the practices and capabilities of design tie into the larger human sphere. Particularly as we look

towards the future, which means as we look to the possibility of a future, that is a non-catastrophic future, this is crucial. Design has little meaning if it cannot be linked directly to the wider human project. Thought only professionally, design and its history are of little account. To put it bluntly, neither matter—which precisely explains why, up to the present, for other academic disciplines, design has not been a matter of concern.

From the side of the history of design narrowly conceived one proof of this is the manner in which design research—as well as most practice—ignores this history. Being unable to see in it any real contribution to knowledge, research sidesteps it, and thinks itself all the more scientific for so doing. Design research is of course as mistaken in this as it is in most other aspects of how it conjugates knowledge. It is precisely the almost complete lack of historical perspective in design research that renders what it produces all but null-and-void as genuine understanding.⁶ The visible testament of this is the depressing weakness of most doctorates in design. Yet the stance is understandable, if not defensible. If, on the grounds of 'discipline,' a field eschews both practice and knowledge and if we have a structural gap between a the norms of putative field and its substantive content, then it is difficult to see in what way that discipline contributes to knowledge.

In a parallel case (that of "political philosophy") the philosopher Alain Badiou used a trenchant rhetorical formulation to lay out the issues involved. The similarities are sufficient for it to throw light on what is involved today in how we think design—theoretically as well as historically.

Pointing out that in how the field presented itself what was clear was not what that field was but only what it was not—'*neither the name of a thought ... nor the name of an action*'—Badiou continued: 'I admit to being quite struck by this double negation. If [it] is not a truth procedure touching the being of the collective in question, or even the construction

and animation of a new and singular [praxis], aiming for the ... transformation of what is, what can it be? ... Neither a determinate factor as far as the objectivity of situations is concerned nor a militant agent in the seizure of their latent possibilities, what does [it] consist in?' ... 'One will demand to know at once if [this activity] must therefore be established on the side of inactive judgment, or of the judgment which issues no maxims for action.'⁷

These negations are powerful—precisely for their negative consequences for thought.

'Neither the name of a thought ... nor the name of an action' reduces design essentially to a value, but a value that is not principally inscribed in thought (at the level of a truth procedure) or action (a new and singular transformative praxis) or in the contexts in which it acts ('not a determinate factor ... in the objectivity of situations ... and the seizure of their latent possibilities'). Design is a value exemplified in designed things but there is no understanding of how that value is inscribed, just as everything that is not "value" (thought, action, situation) disappears from explicit consideration. This explains why the history of design—and through it the theories of design that as axioms rule 'commonsense' views as to what design "is"—are so ambiguous as to its subject matter. It touches upon thought, action, contexts but does grasp any of these fully.⁸ In compensation history turns to judgment and 'facts' (which may not—and usually does not—mean analysis).⁹

But these negations are by no means confined to history. They enter into practice too. Taken together they empty design of its most vital content. *Their reconstruction would be at the heart of a renewed understanding of what design as a mode of acting in the world actually achieves.* Still, the major problem here, however, does not lie principally with history but rather with our conception of the activity, i.e., with our understanding of design.

Professionalization extracts a price that all professions are subject too, once constituted, their quasi-autonomy causes them to lose sight of their ontological role. One thinks here of Adorno's comment on applied thought—that it suffer(s) 'what triumphant thought has always suffered. [If] it willingly emerges from its critical element to become a mere means at the disposal of an existing order, then despite itself it tends to convert the positive it elected to defend into something negative and destructive.¹⁰ Rendered instrumental, all that is most valuable in the activity gets lost to sight. Thus, for example, while design still wishes to believe it is a force for good, in fact, beyond self-congratulation, it continues to find it hard—indeed all but impossible—to explain in what ways it is indeed "good." A by no means negligible consequence of this is that it vitiates all claims to virtue.¹¹ Stripped of substantive content assertions of the inherent virtues of design lose credibility. But as the virtues of design disappear and design itself stands for a process often seen as at once banal (in its applicability)¹² yet still mysterious (in its transactions, in its mode of operation) the term loses resonance.

What adds to the confusion is that today design seemingly has no limit to what it may be applied to, either in extent ('ever larger assemblages of production'—)¹³ or to what it may contain or 'comprehend.' As useful instance of this last point note Latour's observation that 'everyone with an iPhone knows that it would be absurd to distinguish what has been designed from what has been planned, calculated, arrayed, arranged, packed, packaged, defined, projected, tinkered, written down in code, disposed of and so on. *From now on, "to design" could mean equally any or all of those verbs.*¹⁴

Unsurprisingly, the sense today that the word is all but emptied of meaning is common even within design. The recent fate of the term "design thinking"—which has rapidly shown itself to be neither a "thinking" nor particularly useful for designing—perfectly illustrates the processes at work here. One result is that the more design seeks to assert its structural (economic,

social, moral) necessity, the more the gap between the assertion and the substantive understanding that underpins it becomes glaringly apparent.

These confusions have implications at the levels of practice. One result is that business and social innovation begin to think "design" in their own terms and distinct from the discourse (such that it is) around design as most in this hall think it. But these confusions also reach into and make difficult the depth understanding of what design comprehends itself as achieving.

Thus the intuition that design (in the words of the late historian and economist of design John Heskett)¹⁵ is at once that which enables us

(i) 'to create a world of artifice to meet our needs and give meaning to our lives,' and (ii) 'to beneficially reshape the world of artifice we have created and inhabit'; while design

(iii) is, itself, at its deepest, 'a unique characteristic of what defines us as human beings on a par with literature and music' is both accurate in essence thought yet remains a mere hope or aspiration (only "accidentally" realized) in so far as these capabilities and characteristics cannot be articulated, and not only in proto-professional but also in ontological terms.

But it is not only understanding that is thereby hobbled. A weakened understanding of design cannot guide practice—which is precisely why so much professional design today offers a mere shadow of its sometime aspiration. Design that has lost access to its ontological moments loses access to its own practice—which, as we know, is then all too vulnerable in the face of dominant instrumental pressures.¹⁶ One outcome is trivialization. Another is the ease with which design evacuates responsibility for its actions. There is little need to detail this. Daily practice all too often confirms both in the worst possible way.¹⁷

This is precisely however, why today the injunction that 'the task to be accomplished is not the conservation of the past, but the redemption the

hopes contained in it,' could not, for design, be more acute or significant. *To redeem the hopes contained in the [designed] past is to recover the deeper contents contained in the assumption of design's virtue.* It is only when design sees itself as engaging with human hopes and aspirations in the wide sense—and can articulate the nature of that engagement; can explain in what way it engages and helps materialize those hopes—that it can come back to visibility (to itself as well as to others) as no longer the embarrassment that, in practice, if not in its self-image, it so often exemplifies.

On the other side, that of the social, or of history, the requirement is equally as strong.

Faced with crisis, and today we are *in* crisis—it is now and for the foreseeable future our *inescapable* condition, ecologically certainly, social, politically and economically too¹⁸—one demand irrevocably placed on our agenda is that we develop capacities to engage with the world *otherwise* than we are now doing.

Both of these aspirations—towards the recovery of design and towards the recovery of the hopes embodied in the past towards a humane future—are future oriented. Yet both are dependent upon recouping the past. The latter is not 'dead,' not the museum, not "merely" history, but the site of the possible redemption of the future—now—lost. The term means that, for the first time in human history, the future is today what cannot, as a generality, any longer be assumed, least of all as that which is 'naturally' improved from the present.¹⁹ That which once naturally indicated hope—because it incarnated possibility, and in the modern period was the very source of energies for transforming the present—is today a zone of anxiety and uncertainty.

(Bruno Latour offers a neat formulation of where we have got to when he notes that 'ecological crises, in such a view, are the slow and painful realization that there is no outside anymore. It means that none of

the elements necessary to support life can be taken for granted').

As we ponder this we realize that there is an almost exact relation between the loss the future and our loss of the past.²⁰ One reason for this is that while the crisis of the future is objective we experience it as a loss to thought. We discover that we cannot bring the future into focus as a zone of possibility except as the technological and economic extrapolation of what-is, or as an inchoate fear of social crises that we cannot even name with any precision. On either side this forbids real consideration of alternatives, of what could-be—meaning what could be qualitatively other, what could, or what might, be instituted to both stave-off possible catastrophe and to build those social and futural bridges which might reach across to a humane and more pacified world.

In relation to this project design recoups its history as *hope* in the interests of a future that cannot any longer be assumed but must rather be brought carefully into being. This means that recovery of the past is the condition for the recovery of the future.²¹ But as we re-cover for the sake of the future we recover from it lessons we can take into the task of reconfiguring what-is in the interests of the future.

Design is key to this process, not as "Design," thought only as a marginal profession, but as, and because, as will come clear below, design *considered as a mode of acting in the world* is a crucial element in shepherding the future into being. Design is in this sense perhaps—and I stress *perhaps*, no absolute assumptions should at this stage be made, the possibility remains yet a question—one of the vital agencies and capacities, one of the models of acting (as a 'cautious Prometheus' in Latour's at first odd-sounding but by no means foolish phrase) through which, in contradistinction to the "Promethean" forms of the technology and economy as we now know them, we can work towards the recouping of the future.

But (to repeat the sentence made above) to redeem the hopes contained in the [designed] past is also to recover the deeper contents contained in the perceptions of design's virtue. If it is only 'when design sees itself as engaging with human hopes and aspirations in the wide sense—and can articulate the nature of that engagement, can explain in what way it engages and helps materialize those hopes—that it can come to full visibility (to itself as well as to others)' then the project of redeeming the future through redeeming the hopes of the past, and redeeming design, are one and the same. In this project design recoups its history as the self-understanding of what in fact, thought now as a generalized capability and capacity (though never autonomously) it can concretely achieve.

But that design might be anything more, in the future, than 'a surface feature in the hands of a not-so-serious profession,' is also down to the third aspect of this equation, the fact that we are in the process of a very deep historical shift. For design, the epoch in which it could act "sufficiently well" without knowing what it was doing²² or without articulating, better than it has so far managed, its genuine capabilities (and thus also its limits) is essentially over. It is over because, to take up directly now one of the themes of this conference—though it has been implicit all along—what we are dealing with here is transition: the transition not just from design in the industrial epoch to design in the epoch of the artificial, but from the industrial epoch *per se* to the epoch of the artificial *per se*. By 'epoch of the artificial' I mean that we are now entering into (have being doing so at increasing pace since c. 1945) an epoch in which it is the artificial and not nature that is now the horizon, medium and prime condition, of our global existence. The industrial epoch initiated industrialization and artifice at global scale. But even as late as 1939 this did not constitute the totality of the world. After 1945, the A-bomb symbolically (as destructive capacity) and the spread of industrial culture and capitalist consumption substantively (to say nothing of the mechanization of agriculture, urbanization and, after

1990, both ubiquitous digitalization and increasing evidence of man-made climate change) set in chain a transition that is still on-going but whose outlines are now clearly perceptible, where indeed the horizons, medium and prime conditions of existence are now set by and through the artificial.

As will become clear below, what changes in this transition is *structural* position of design within the overall ambience of the world-as-artificial. From a subaltern position as an essential, but still marginal, aspect of industrial production and consumption, design today emerges—*though not necessarily as "Design"*²³ – as a becoming – ubiquitous mode of acting in the world.

What does not change however, or what changes less than we might imagine, is that design in this new sense does not simply appear as if without precedent or without context; rather, and this is what gives history today its potential force, many, perhaps in one form or another *all*, of the moments and aspects of design as a mode of acting in the world—design 'in the expanded field' we could say—find their anticipation in history. History then in this sense becomes a means of charting—expanding, making adequate—the understanding of design; it is the recouping of what design "is" (and might be) as we enter into this epochal transition (and which is certainly, at minimum, a transition out of the structures and norms of the older industrial economy).

II

But how, in practical terms, can this be achieved? And in what ways, precisely is design recuperative in the sense implied here? One very broad answer, though it is less directly an answer than a framework for thinking about the relation past-future, is that, as Latour puts it in a way that is at once naïve and profound [in the paper I've already referred to, i.e., the paper he offered to the Design History Society in the UK in 2009] *the expansion of design is a symptom at once of this*

*transition and of a deep 'change in the ways in which we deal with objects and action more generally.'*²⁴

In other words, in the transitions we are now going through not only do 'industry' and 'economy' shift their character and their role (the former no longer formative in the same way; the latter shifting its arenas of value-creation) but at a deeper level so too does the nature, character and work of objects, and so too the nature, character and work of action.

For the first, objects (or perhaps better, products) function, in Latour's terminology as "things," i.e., they become increasingly conceivable as 'projects,' complex and 'disputed' 'assemblages of contradictory issues.' For the second, we experience of what Latour calls a 'sea-change in our collective definition of action,' a movement towards a non- or a post-Promethean sense of what it means to act.' 'At the very moment when the scale of what has to be re-made has become infinitely larger—no political revolutionary committed to challenging capitalist modes of production has ever considered re-designing the earth's climate—*what it means to make something is also being deeply modified.*'

But above all, says Latour, what we see in what is emerging today, and what unites these two movements, is that what were previously "matters of fact" now ... become "matters of concern."

*

What does Latour mean by all this? How do we understand it and its implications both for practice and history?

One point is that these developments, and which of course run sharply against the grain of earlier modern technologically-based conceptions of objects and action, are for Latour not merely technical, or superficial changes in the form of things. They are nothing less, in fact, than an indication of 'a deep shift in our emotional make-up.'

What is the basis of this shift? Objectively, as already hinted, it is the rise of the artificial and of artificiality per se—to the point where the *question* of the artificial is the question with which we must deal.²⁵ But the subjective basis of this move is subtly different. It is, suggests Latour, a different understanding of dependency, a profoundly "anti-modernist" understanding. 'A modernist' says Latour, 'is someone who lives under a vast dome, and who sees things as though sitting under a huge architecture, the Globe of Science, the globe of Reason, the globe of Politics. For the modernist, the humanist is the one who reads a book under a lamp or who sits clothed in some sort of Roman toga on the stairs of a huge amphitheater under the painted fresco of some immense dome... *except that in the modernist architecture, the life supports necessary for this Dome or this Globe to be sustainable have not been explicated.* A modernist takes for granted that there will always be air, space, water, heat, for the development of his or her "global view.'" But of course this is precisely what today cannot be assumed, and in fact never could. Athens depended on the energy of slaves ("speaking objects": Aristotle). As conditions are now forcing us to recognize, 'to define humans is to define the envelopes, the life support systems, the Umwelt that make it possible for them to breathe. This is exactly what humanism has always missed.' The dissociated subject is a fiction. In fact we are always 'dependently enveloped, entangled, surrounded; we are never outside without having recreated another more artificial, more fragile, more engineered envelope. We move from envelopes to envelopes.'

Latour's analogy is the cosmonaut. 'To try to philosophize about what it is to be "thrown into the world" without defining more precisely, more literally ... the sort of envelopes into which humans are thrown, would be like trying to kick a cosmonaut into outer space without a spacesuit.' He continues the analogy further, which gives us the sense of what is now changing, and anticipates a crucial concept to come: 'When you check on your space suit before getting out of the space shuttle, you are radically cautious

and cautiously radical... you are painfully aware of how precarious you are, and yet simultaneously, you are completely ready to artificially engineer and to design in obsessive detail what is necessary to survive ... the cosmonaut is emancipated from gravity *because* he or she never lives one fraction of a second outside of his or her life supports. To be emancipated and to be attached are two incarnations of the same event, provided you draw your attention to how artificial atmospheres are well or badly designed' — and providing that you accept, in the first place, this dependency, a dependency of course enforced on the cosmonaut and now (in effect) forced on us by incipient ecological disaster. The 'emotional shift' is therefore this: it the (often reluctant!) admission that things—objects—matter. Latour again: ... when humanists accuse people of "treating humans like objects," they are thoroughly unaware that they are treating *objects* unfairly. A humanist cannot imagine that objects may be things, that matters of facts might be matters of concern, that the whole language of science and engineering might be portrayed as anything other than the boring carriers of the indisputable necessities that modernism has rendered popular. Humanists are concerned only about humans; the rest, for them, is mere materiality or cold objectivity.' But in a condition of dependency, and not just on nature but also on artifice, this stance cannot hold.

Both humans and non-humans have today been treated as "matters of grave and careful concerns.". Our period is the struggle to come to terms with this new objective and subjective reality.²⁶

Three concepts epitomize this change.

The first, already in effect noted, is the idea that *'the more objects are turned into things—that is the more matters of fact are turned into matters of concern—the more they are rendered into objects of design through and through.'* Concern means dispute: incommensurable world-views. Action therefore becomes necessarily a matter of negotiating

incommensurability. Design, which in its essence is the negotiation of incommensurability therefore becomes ubiquitous in making; or, to put it another way, today *making "becomes" design*—if in complex ways where, as in the instance of i-phone earlier, design becomes extended considerably beyond that which we traditionally thought. A paradox immediately apparent here is that while the development from 'matters of fact' to 'matters of concern' may indeed mark the transition we are now going through, it also marks a return to older models of making. The concept of a 'matter of fact' can scarcely enter pre-modern thought. To put this the other way around, before industrialization almost no objects were *simply* 'matters of fact.' During industrialization the object in many ways becomes *reduced* to a statement of fact. It is determined by law and hence has the status of an apparent 'fact.'²⁷ The return to objects as "things,"—'matters of concern' in Latour's vocabulary; complex gatherings and assemblages of disputed and contradictory issues—*objectively* calls forth design, not as the subjective balm for objective law (designing as packaging) but as the deeper level process of *configuratively* "resolving" incommensurable moments and demands. 'The idiom of matters of concern reclaims matter, matters and materiality and renders them into something that can and must be carefully redesigned.' Design, in this view, is the name we give to that mode of configurative acting that is capable of, this task.²⁸

The second proposition echoes the first by emphasizing the manner in which today *'matter is absorbed into meaning (or rather as contested meaning) in a more and more intimate fashion.'* As things, Latour says, are increasingly *'conceivable as complex assemblages of contradictory issues,'* so the question of artefactual *depth* comes to the fore. It is no longer (not that it ever truly was) a case of design only adding 'superficial meaning to what was brute matter and efficiency' ('a veneer of form') it is that the thing itself (and thing here is tangible or intangible, object, interaction or situation) is both the result of, and itself embodies, knowledge as well as the results of and

capabilities of, interpretation. It thus in turn requires *'all of the tools, skills and crafts of interpretation to [be brought] to the analysis of that thing.'* Adequate method is no longer only description. A hermeneutic is also required. Matter absorbed into meaning—which also means meaning materialized or embodied in matter—is of course the inter-relation of mind and matter. This also means that things thought in this perspective stand as the immediate refutation of that concept which has most painfully dogged attempts to think things since Kant, the distinction between 'means' and 'ends.' Ever false, the digital, the folding together of language (code) and instrumentality, is the final nail in the coffin of this opposition. In truth it was ever false, a poor rationalization of a felt necessity to justify the distinction of fine art—and a displacement from a more authentic thinking concerning things, their work and their configuration, and their poetics.²⁹

The third proposition that underpins Latour's paradigm shift is that in so far as making extends into design then it *'necessarily involves an ethical dimension': 'The spread of design to the inner definition of things carries with it not only meaning and hermeneutics, but also morality. More exactly it is as if materiality and morality where finally coalescing'* [my emphasis]. Latour is emphatic on this point. *'By expanding design so that it is relevant everywhere designers [necessarily] take up the mantle of morality as well.'* He continues: *'This is of great importance because if you begin to redesign cities, landscapes, natural parks, societies, as well as genes, brains and chips, no designer will be allowed to hide behind the old protection of matters of fact. No designer will be able to claim "I am just stating what exists" or "I am simply drawing the consequences of the laws of nature," or "I am simply reading the bottom line."* This in turn extends and returns questions of making and design to politics—and specifically the politics of what Latour calls, 'matters of concern.' *'A politics of matters of facts and of objects has always seemed far-fetched; a politics of designed things and issues is somewhat more obvious'* —and is for us only in any case the manifestation of a concrete problem: 'What

is clear is that the collective definition of what artificial life supports are supposed to be [today] becomes the key site of politically minded investigation.' Designing is here one of the ways of thinking and acting (thinking for acting) around and in address to this problem.

These three propositions are for Latour the equivalent to concrete truths. That today matters of fact are becoming 'matters of concern' (and hence of design); that we are in a time of the interpenetration of mind and matter (the 'absorption of matter into meaning') and that today making 'necessarily involves the ethical' (and by *natural* extension the political) are the truths of our moment. They are the conditions that underpin what he calls the 'five advantages of the concept of "design"' for our moment.

By "advantages" he means first advantages in opposition to, or vis-à-vis or as an alternative to what-is, i.e., existing, "modern" means of technological and (although he fastidiously hardly refers to the term) capitalist modes of collective action. But, second, he also means this term affirmatively, in terms of how the mode of generalized acting we can call design resonates, even if in some ways seemingly paradoxically, vis-à-vis what is now emerging as the new conditions, possibilities and demands of making.

These five advantages are therefore not the 'advantages' of design per se, or of design in the modern professional sense. They are the advantages of design thought in its extended purview, design as a generalized mode of acting in the world not merely a relatively professional activity, design as a mode of acting in the world in terms of the world as we are now encountering it, i.e., as a world defined—though Latour does not say this—by the coming to presence if not dominance, of the artificial. So implicitly these are historically the advantages of design for the future—in *extremis*, the advantages of design for what the condition of making *need* to be in this century. "Need" here meaning to counter 'de-futuring.' "Design" in this form is therefore one answer to the question: What

forms must acting take to become adequate to the conditions that are now emerging?

Lukács once described form as that which is simultaneously aesthetic and social. In Latour's formulation "design" is that which is simultaneously design in the both limited sense that we know it (and appraise it historically) and in the extended sense as a mode of acting in the world. That is why, despite the problems and weaknesses immediately apparent on reading them³⁰, these 'five advantages of the concept of "design"' nonetheless have acute value for this project. They begin to show how it is that design can supply a model, or models, for acting in regard to the conditions that are now emerging; but at the same time these are also, in their own way, descriptions, however inadequate or tentative, of the work of design down to the level of the artefact—and thus also models to set historical inquiry in progress in terms of opening up the nature and character, and above all the work,³¹ of design things.

1. *Humility*, or modesty. The ability (perhaps) to be less hubristic than technology or making per se is the first advantage or virtue of design noted by Latour. 'It seems to me that to say that you plan to design something does not carry the same risk of hubris as saying that one is going to build something.' The immediate problems with this formulation (architecture is its unfortunate refutation) should not disguise the more fundamental insight. Latour is here making a virtue of what he called earlier the 'weakness' of design. Whereas modernism could only think in terms of the wholesale break with what was in order to bring what could-be into being (and hence could only think in terms of wholesale transformation—design or revolution indeed!) the situation of designing today is infinitely more complex—and, as Latour points out, paradoxical. For the idea of the modesty of designing as one of the essential characteristics or virtues of acting (well) in the world today, arrives 'just at the moment where the dimensions of the tasks at hand have been fantastically amplified by the various ecological crises.' 'Yet' he goes on to say, 'it is precisely

because the tasks have increased in scale and impact that we require a 'non- or post- Promethean sense of what it means to act.' The reason for this is that what we need to engage with is now at such scale (the re-design of how we stand to climatic systems) and its implications are so huge, this act must be taken with considerable care and thus with requisite modesty.

What is most radical and most extreme as a task must be undertaken with a certain delicacy, even while it is also the most radical project we (as humans) have ever attempted. That this model of action is, in Latour's terms, 'taking over' public consciousness, may therefore be an essential development, for it points to what now must be now engaged with. Humility, or modesty, is therefore the force of designing-acting in this mode. This force is quite different to that manifest in modern notions of will. Whereas nihilism is the outcome of the latter, 'humility' in this particular sense is its opposite, not action but the resolute ability to act with determination but with care.

2. *'Attentiveness to details'*—or what we can call the craft moment in design ['the sense of skillfulness, craftsmanship and obsessive attention to detail'] is the second advantage that Latour sees in design. It stands, in effect, for the "slowing" action of design. Latour's point is that design thought from the emphasis, indeed 'obsession,' of design with detail, craft, and skill runs counter to the modern (ist) urge to revolutionary transformations ('We will) in which questions of detail, or the concrete, are eschewed (Latour: 'it was unthinkable to connect these [craft] features of design with the revolutionary and modernizing features of the recent past'). While, historically, we can again think almost instantly of counter-examples³² Latour's point, echoing what he began to chart above, is that it is precisely this "slowing" of design (thought in its craft-like perspective) that is consonant with the current 'modification' in how we conceive of making, where things are no longer as he puts it, "made" or "fabricated" (in the technological sense—in which violence is an internal adjunct) but rather 'carefully,' even 'precautionarily,' designed.

This precautionary attitude is apposite in a context where, especially ecologically, we need to think in terms of having to be, or having to do that odd thing, being at once 'radically careful' and 'carefully radical.' Questions of detail, skill, craft—in short *care*—are not merely metaphors of a mode of acting but exemplary indicators of a particular way of conceiving acting; above all, of one that affirmatively reconciles (models) in its moments, at least hypothetically, the impossible tension between the incommensurable requirements of radical change and care.

3. If the first two advantages of design speak, in effect, to the slowing of technical action, the third advantage or connotation of design Latour sees as *meaning*, or the requirement of interpretation. This was already mentioned above, but it is worth noting that against the modern emphasis on the mono-functional utilitarian object-product and on the model of designing that saw the bifurcation of "use value" and "exchange value" (of "function" and aesthetics) Latour's formulations emphasize two crucial points: (i) the return of a concept of things (from objects to situations, not necessity to the tangible thing is necessitated) as gatherings or 'complex assemblies of contradictory issues'; (ii) the proposition of the *absorption*, and not merely the masking of a superficial non-relation, of 'matter into meaning'—also hence also of meaning (language, code but also more than this) into matter. "Meaning" is obviously an inadequate term here—it is too modern, too much a production of that split (between technology and language, 'work' and 'interaction') which so exercise thinkers across the C20th. What is actually being referred to here is the much more concrete process of how knowledge and understanding, at once of persons and situations/contexts and things are embodied into the configuration of things. But as in the previous discussion, one understands the direction of Latour's thought here—as also the link he seeks to make to the older etymological understandings of the word thing around the terms "gathering" and "assembly," a connection that allows us to think much more clearly about the negotiative and synthetic work

of design, about the fact that design is preeminently a process of negotiating incommensurable requirements and therefore *intrinsically* a matter of achieving and making exemplary propositional syntheses concerning 'complex assemblies of contradictory issues.'

4. The fourth advantage of design in the Latourian perspective is the simplest to grasp. It is the contention that to design is always to re-design. Latour sees this as challenging the again modern emphasis on creation *ex nihilo*. He links this (inadequately in my view in the way he expresses this) to the idea that the sense of something 'slightly superficial in design ... something relative' preserves something in design that allows it to act as the other 'to founding, colonizing establishing, or breaking with the past. It is an antidote to hubris and to the search for absolute certainty, absolute beginnings, radical departures.' Affirmatively, we could say that design from this perspective is in essence propositional: that re-design always takes a form (which can be expressed typographically but not verbally) "This!?"—meaning that it combines both an assertion and a question; that it *is*, and that it *asks*.

5. The fifth and final advantage of design in Latour's matrix is the one to what I gave the most focus above so I will not re-iterate the point. It is that today designing 'necessarily involves the ethical dimension.' Latour links this, again inadequately, but yet tellingly in terms of the direction in which he takes it, to questions of "good" and "bad." He says to questions of 'good and bad design,' but of course the real issue opened here is good and bad per se; specifically, what is the notion of the good in a world made over as artificial? And how does design engage with the notion of the good? (Just as of course it also engages with the "bad": design has after all a history of serving evil—dramatically in the case of Fascism³³; insidiously, but on occasion with scarcely less wickedness, as Victor Papanek reminded us 40 years ago³⁴, in terms of the orthodoxies of the profession). Nonetheless, the key point is made. No action that is as bound into life as design *necessarily* is can be thought adequately outside an ethical perspective. Design

entails propositions concerning the good. There is no design outside its exploration—even when the work intentionally turns its back on this thought. Equally, no activity that is also at the same moment as bound up with power and interests as design can be thought outside of politics and interests (which does not mean it is a merely a kind of sub-section of these). Design, which naturally extends ethics into politics, does so from the stance of the universal (all design is ultimately addressed to all), of possibility (within and of the situation) and of gauging (designing is a gauging of the conditions of living translated into forms that reflect (embody, enact, exemplify, embellish) that gauging. Crucial here also is that design, as an instantiating of ethics and politics is capable of extending the notions of both beyond the limits we assign them—the proviso of which is that we are in turn capable of interpreting what is enacted.³⁵

Now, I have presented these five moments of Latour's argument³⁶, not because I agree with them 100%, or because I think them in any sense definitive in terms of the 'advantages' of design—on the contrary I do not—but because Latour, again naively but at the same time bravely, does what few in design have yet dared to do, which is lay out design not simply as "design" but as a mode of acting in the world.

To be sure, as you will have felt on hearing this and certainly on reading his text, there are some gaps in the formulation, above all explanatory. There is the absence in Latour's account of any indication as to *why*, historically, this change in our collective mode of acting is *objectively* developing such that conditions emerge which both call for (demand) and *enable* something close to designing (in the expanded sense) to emerge as a necessary—and formative—mode of action in such a world.

I am not, however, going to deal directly with this question here. I have done so in some forthcoming papers and in a work in progress.³⁷ While understanding this development is in my view crucial—for we then understand the *historical* depth of what is being

touched upon here—I'd like here to take this as read, and in the time I have left, to focus on the ways in which, despite the weaknesses all too visible in Latour's account, his model nonetheless offers us the *beginning* of a model of designing that is productive for thinking design at once in terms of the emerging present-future *and* the past.

What I am suggesting to you is that we have here a kind of incipient model of an ethical history of design capable, *as history*, of addressing the future.

What is the basis for this claim? It is two-fold, at once objective and subjective.

From a design perspective, what Latour describes with an eye to the future can also be read, without contradiction, into the work of the past. The virtues that Latour describes—respectively, from his five points, now using simply the keywords: '*modesty*,' '*craft or details*,' '*meaning*,' '*re-design*,' and '*the ethical or matters of concern*'—are by no means confined to what is emergent.

As I spoke, historical examples will have immediately come at you. The virtues of modesty; the sense of human import in detail as the attention to the resonance and reciprocity of things; the implication of knowledge (meaning) in matter (with the converse understanding that designed things embodying knowledge are themselves objects of and for understanding); transformative instances of re-design; the ethical implications of making and its attunement... all those and more are materially instanced in the past, and are instanced so *both* as moments within what we might call the internal relations of design—everything that is for me encompassed by and in the configurative act of designing, and the external relations, or the wider compass of and action of designed things as they operate and act within the wider frames of social relations, above all as negotiations between material human needs and the forms in which those needs are taken up and met.

All these can be read—which means they can be recovered—from the work of the past. Moreover, it is in and through their recovery in the work of the past that the relatively crude model that Latour presents (*necessarily* over-simple given the scope of his talk) can—and one predicts, in the immediate will—be augmented, extended, developed and improved. Latour's model *prompts* the analysis of historical phenomena, but it what it prompts is not simply the investigation of the past on its (the models) terms but the reconstruction (if necessary) of this model as the evidence embodied in the past modifies it.

But, note that what then also occurs, methodologically speaking,

As history or historical work works and re-works (something-like) Latour's model *so it works and re-works the theory of design as a whole*—at least along the dimensions in which we can think it as a mode of acting in the world (arguably, for the future, its most important dimension). This means the divide that has accompanied virtually the entire trajectory of the modern study of design between "history" on one side and "theory" or "research" on the other is here, at least in principle, overcome.

History is here not the recounting of the "story" of that which is already known in all its essentials (a history for which nothing essentially remains to be discovered—the central critique that can be mounted against all scholastic history) but the *investigation* of what design has been, might be understood to be, and might be thought again in these terms in the future. Since *possibilities* are of the essence of what design is about, then we might say that this is doubly consonant: history is the investigation of the possibilities of design(ing) in the context of the exploration of the *possibilities* of design as itself the exploration of possibility. I emphasize this circularity because this seems to be to be virtuous, to set in chain modes of thinking that break us from the history/theory divide and which conversely use both as the check or the test of the other.³⁸

All this is not, note, to seek a return to a singular notion of design as a trans-historic activity. No final field theory of design is possible.

On the contrary, in this process, historical difference is here both preserved and thought. What occurs, however, and this is crucial, is at once the relativization of the norms of designing in the industrial epoch, and an opening to visibility of all that, in the actions and processes of design, its capabilities and aspirations, was rendered conceptually invisible in that period.

To see design as a mode of action in the world is to see it in its true context of operation.

To look at the past in these terms is then also to begin to open up the density of what occurred within and beneath the often suffocating layers of professional ideologies that at one and the same time materially and economically enabled and called forth design, and limited it, above all in thought and in how design came to consciousness. But it is also, and this is crucial, the way we think design *back into* history (and thus also our future).³⁹

Here we can come back, once again, to the injunction with which I began: 'The task to be accomplished is not the conservation of the past, but the redemption of the hopes contained in it.'

The hopes contained in the past are the hopes of a world hospitable to all (to all species I will add, for our human *hope* is that we do not purchase *our* conditions of existence at the expense of those of other species—on which, not so ultimately, we are dependent). What Latour embryonically posits is the beginning of the way in which human hopes for a humane hospitable world—hopes that cannot be divorced from the human project of what Herbert Simon called, 'the search for good designs'⁴⁰ — can be organically linked to design in the more limited sense, not as an abstract value, or the act of 're-looking',⁴¹ but as *capacity* or as a series of capacities.

Between Herbert Simon's extraordinary and never sufficiently thought postulate; the nature of the work achieved through the act of designing; and through something *like* Latour's model, we now have the embryo, at last, of a set of concepts, categories and actualities that can *begin* to allow us to move back and forth between the human in the wide sense, and the more focused, the necessarily narrower, concerns of design—and can do so in ways that do not end up postulating either of the mantra's that are so often taken up at this point; that "everything we do is design" or (that which ironically comes to the same thing) that design is nothing—but a narrow professional concern.

In so far as both of these *empty* design, the wager of the act of thinking design historically in the manner outlined here is that at last we begin to fill the content of design.

III

Yet in sketching all this all this I am painfully aware of the degree of abstraction I have brought to the problem. One excuse is that this essay is the corollary of the (extreme?) empiricism that characterizes—if unsurprisingly—the history of design. Another is that its implications are not all necessarily abstract. On the contrary, the point in view not to a history of facts and a theory (or a research) of abstractions, but their opposites, a history that builds out of the analysis—the detailed analysis I insist—of material, actual things; of design configurations, in their materiality if you like. But again, in what context one asks? And one receives the answer: from the context of history.

Here let me put in place a quote that the art historian T. J. Clark used to some effect back in 1974, when he wrote a short but seminal essay on the social history of art entitled the 'The Conditions of Artistic Creation'.⁴² The quotation comes from Georg Lukács, from 1922, from the essay "Reification and the Consciousness of the Proletariat":

'And yet, as the really important historians of the nineteenth century such as Riegl, Dilthey and Dvorak could not fail to notice, *the essence of history lies precisely in the changes undergone by those structural forms which are the focal points of man's interaction with environment at any given moment and which determine the objective nature of both his inner and outer life.* But this only becomes objectively possible (and hence can only be adequately comprehended) when the individuality, the uniqueness of an epoch or a historical figure, etc., is grounded in character of these structural forms, when it is discovered and exhibited in them and through them.'⁴³

Clark was seized by this quotation because two of three historians that Lukács names—Riegl and Dvorak—were art historians.⁴⁴ "What an age this was" says Clark, "when Riegl, and Dvorak were the real historians, worrying away at the fundamental questions – the conditions of consciousness, the nature of 'representation.' And he continues:

'the roll-call of names – Warburg, Wofflin, Panofsky, Schlosser – is not what matters exactly. It is more the sense we have, reading the best art history of this period, of an agreement between protagonists as to what the important, unavoidable questions are. It is the way in which the most detailed research, the most arcane discoveries, lead back time and again towards the terrain of disagreement about the whole nature of artistic production. What are the conditions of artistic creation? (Is that word 'creation' allowable anyway? Should we substitute for it the notions of production or signification?) What are the artist's *resources*, and what do we mean when we talk of an artist's materials – is it a matter, primarily, of technical resources, or pictorial tradition, or a repertory of ideas and the means to give them form?

Clearly – the convenient answer, which has become the common wisdom now – it is all three: but is there a hierarchy among them, do some 'materials' determine the use of others? Is that hierarchy fixed?

Clark's invocation of "questions" as the basis of inquiry—the *only* basis on which inquiry stays alive— is still powerful: a continuing riposte to false scholasticism. Yet it is notable that however much he plays off Lukács' quote in his essay he gives almost no attention to the substantive part of the quotation – the part that must have jumped out, I think, at everyone here. The half-sentence '*The essence of history lies precisely in the changes undergone by those structural forms which are the focal points of man's interaction with environment at any given moment and which determine the objective nature of both his inner and outer life*,' after all describes exactly the subject matter of the history of design.

Design is after all the act of configuring '*the structural forms which are the focal points of man's interaction with environment at any given moment*.' And it does so in a particular manner. The reason why such structural forms '*determine the objective nature of both [man's] inner and outer life*'—laying equal stress here on the 'inner' as well as outer—is that what designed configuration achieves is precisely the achievement of a relation—an *affirmative* relation we must insist—between the inner and outer, or between, to use a more general language, subject and object (except these terms are endlessly reductive in comparison to 'inner' and 'outer').

So important is this work that we need in fact to slightly re-phrase Lukács sentence: '*The essence of history lies precisely in the changes undergone by those structural forms which are the focal points of man's interaction with environment at any given moment and which determine the objective and subjective nature of both his inner and outer life*.'

In fact, we can go one stage further and say that the entire point of design—almost, I would say its essence—is that it achieves this most difficult of (non-) relations. If design is the ability (as I believe it is) to deal with incommensurable requirements the incommensurability most contentious, most difficult to resolve, especially in the modern world, is that between object and subject. Historically, as it manifests itself within the industrial product, design is after all called into being to deal with this split. We can say that, through the forms of modern design, design deals with this split in the form economy wishes—that is it re-unites 'use value' (or technology) with exchange-value (or desire)⁴⁵ and does so in so frictionless a manner that, erased at the level of our encounter with things, the original split is seemingly paradoxically all the more preserved in its operative underlying social force.

Let us make no mistake here. The subject-object split is perhaps the central distinction from which the entirety of the modern period and its economic and social relations flows. What begins, at least philosophically, with Descartes rapidly becomes, as representation, the formative operative means of distinguishing, and thus valuing, both 'subject' (he who represents, and my use of the male pronoun is deliberate) and 'object'—all that is not a subject and whose measure, as Heidegger pointed out in probably the best single essay we have on this process,⁴⁶ is given by the subject (for objects in his view possesses not intrinsic ability to name and give measure to themselves—they are named, as precisely, slaves and servants were named).

To say this is to give immediately a suggestion why, of all arenas within design, looking at the manner in which design "resolves" this split in practice is the moment where we are also looking at the most acute intersection of the design configurative act, in the tight sense of this work, and wider social relations. It is to look at how design may both—and in the same moment—serve this effacing of this split and

instantiate in that effacing the material proof of its transcendence or overcoming.

The material way in which design “solves” this problem should not be discounted. For example, Adorno, in *Negative Dialectics* (1966) his last and deepest philosophical work, struggles with and gives considerable attention to this problem. The closest thing to a definitive statement that he comes to is the following: ‘Mediation of the object means that it must not be statically dogmatically hypostatized but can be known only as it entwines with subjectivity; mediation of the subject means that without the moment of objectivity it would be literally nil.’ To which he adds the significant rider: ‘an indication of the objects preponderance is the impotence of the mind—in all its judgments as well as, to this day, in the organization of reality. The negative fact the mind failing in identification, has also failed in reconciliation, that is its supremacy has miscarried, becomes the motor of its disenchantment.’⁴⁷

Thought carefully, the first and important sentence of this pair is much less abstract than it seems. Nonetheless, even when we grasp the essential dialectic, we realize immediately a truth: that what Adorno can *only* posit as a *should* or as an obligation placed on mind, design *enacts* in practice—if in the most humble of ways (I am thinking here as I write of my favorite “Good Grips” vegetable peeler that I use on a daily basis)⁴⁸ and does so with apparent ease, the ease which is precisely why design is valued on a purely economic plane (why design was and is essential to commodification) but an ease that is also much less understood, much less thought than it should be. For look carefully at Adorno’s second sentence. He is telling us there that thought (a.k.a. the subject) pays a terrible price for the subject-object split. In this split thought *thinks* it is victorious, that it lords it over everything in the world that is not it: that it, and it alone, can (in Heidegger’s words) give ‘the measure to all things.’ But it turns out, of course, to be not so simple. Adorno’s second sentence says exactly

this. It says, in effect, that the price the subject pays for this is two-fold. First, the subject who represents, dissociates, that is separates himself from everything that is. This was also Latour’s point when he made his savage criticism of ‘the modernist’ quoted earlier in the talk. But, second, and this is Adorno’s crucial point. The domination by the subject of the object is itself illusory. For in the subject-object split the subject does not have all the power. Objectification extracts its price. The subject becomes beholden to the processes of objectification and hence beholden to the object. In this relation the mind (thinking itself as only a ‘subject’) discovers its *lack* of power.

This is the meaning of Adorno’s sentence, ‘an indication of the objects preponderance is the impotence of the mind—in all its judgments as well as, to this day, in the organization of reality.’ ‘Why is mind impotent vis-à-vis the object that it creates? Because the mind ‘failing in identification, has also failed in reconciliation, that is its supremacy has miscarried, becomes the motor of its disenchantment.’⁴⁹ In other words, having created the subject-object split, mind itself (as “subjectivity” in the modernist, dissociated sense) cannot identify with, cannot reconcile itself with, its other—that other on which in truth *its is dependent*.

This is our human tragedy. And it is a real tragedy because the crises that will ensue in the next decades, which are likely to cost the lives of millions and cause untold misery on scales infinitely larger even than those of the last century, are a direct result of this failure.

It is surely absurd, in the face of this tragedy, to put up my Oxo Good-grips peeler!

It is not. For what can be read on one side as nothing more than a commodity gimmick can be read on the other as a model—tiny but nonetheless real—of precisely the ‘identification’ and ‘reconciling’ that Adorno called for.

I am delighted therefore to end this talk with my peeler.
It stands for the virtues of design (as a mode of action)
liberated from Design (Capitalized, an economic
service). Its history, recovered, contains the entire
history of the subject-object split, of false and real
attempts to overcome that split and of the history to
come of that overcoming.

No wonder it is in its form so beautiful!

NOTES

¹ In English translation, Verso, London, 1979: originally published in New York in 1944. See p. xv.

² Of course accumulation through consumption and through that accumulation through manufacture is still significant, especially today in China. But it is no longer formative. The brutal underlying economic fact is that the direct management and manipulation of capital now offers a rate of return significantly higher than the overall rate of growth of the global economy.

³ I should say that, from August 1914 begins Europe's internal violence. In the more than two centuries before Europe had already, and increasingly, exported violence across the world, most savagely, latterly to Africa.

⁴ See the pages Georg Lukács devotes to this topic as a phenomenon of industrial society in *History and Class Consciousness* (London, Merlin Press, 1971 (orig. 1923)) especially p. 102–107.

⁵ The proof of design's real lack of autonomy is that at this moment it is scarcely capable, except at very small scale, of taking a proactive, or even a critical, stance towards what determines it.

⁶ There is an interesting parallel here with economics. In the wake of the profession's embarrassment following the failure to foresee the financial crisis of 2008–9 one contributing factor in terms of the education of the current generation has been thought to be the large-scale abandonment, from the 1970s onwards of teaching of the history of economic thought. In so far as the latter at least offered some alternate perspectives and conceptual maps of economic activity it allowed for a richer conceptual mix within the field and did not allow one economic model ('equilibrium theory') to gain unchallenged orthodoxy. Design research today is in the conditions of economics pre-2008.

⁷ The original is from Alain Badiou, *Metapolitics* (London, Verso, 2005) p. 11, 12, 16.

⁸ See my "The Question of Agency in the Understanding of Design," *Journal of Design History*, Volume 26, Issue 3, August, 2013, p. 331–337

⁹ But its exact opposite: history as a means of keeping 'the Real at arms length indefinitely' (Badiou, *ibid.* p. 10) where judgment and assertion postpone the encounter with the complexity of the thing. In such history (and in the practice that unconsciously takes its axioms from history) it is not a 'question of laying down maxims for action, or of analyzing objective configurations,' rather history is to be found principally in 'the judgment that states whether this—which is not an object but an appearing, a taking place—pleases me or displeases me, and is exercised in the debate of such judgments' (Badiou, *ibid.* p. 16).

¹⁰ Dialectic of Enlightenment, *ibid.* p. xii.

¹¹ Let us be clear: design possesses virtues. There would be no point in pursuing the activity if it did not. The designer Gui Bonsiepe spoke beautifully on this issue a few years ago—see the short

essay, 'Some Virtues of Design' prepared as a contribution to the symposium "Design beyond Design..." in honor of Jan van Toorn, held at the Jan van Eyck Academy, Maastricht, November 1997. The point is not that there are not virtues in design, the question is how they are understood, articulated and brought to consciousness both in thought and through practice.

¹² Latour's damning comment: 'A surface feature in the hands of a not-so-serious profession that added features in the purview of much more serious professionals (engineers, scientists, accountants). See "A Cautious Prometheus? A Few Steps towards a Philosophy of Design": a lecture given to the Networks of Design meeting of the Design History Society, Falmouth, Cornwall, 2008.

¹³ Latour again: the opening paragraph of the above lecture: 'It came to me at a launching party for a Networks of Design meeting — I was struggling to grasp the extent to which the word "design" has been expanded when we were invited to visit an exhibition called "Re-imagining Cornwall"! I was aware that corporations had to be reengineered, natural ecosystems reclaimed, that cities had to be remodeled and wastelands redeveloped. I knew that neighborhoods had to be beautified and political platforms scripted, and that interiors had to be redecorated and journal layouts restyled. The Cornwall exhibit confirmed that I was indeed on the right track: if entire provinces can be redesigned then the term no longer has any limit.'

¹⁴ Latour, *ibid.*

¹⁵ British design historian who died in 2014. Author of *Industrial Design, German Design 1870–1918, Design: A Very Short Introduction* and an important series of works on the economic value of design.

¹⁶ The weekend I was sketching these notes an article indicative of this condition appeared in the *Financial Times*. Entitled, 'The End of Architecture' their architecture critic Edwin Heathcote points to the enfeeblement of architects: 'their role is now principally as shape makers, sculpting profiles for developers' logos. They work for contractors, way down the construction food chain, and have been complicit in their own decline ... all that is are the handful of boutique projects that serve to assure that there is some rationale behind those years of education and those centuries of culture.' *Financial Times*, May 31/June 1, 2014.

¹⁷ As the Dutch graphic designer Jan van Toorn has incisively noted, the 'coinciding group interests of clients and the [design] disciplines' has meant that the 'practices and notions of [professional] design have been introduced into society on an ever larger scale. This has ... fostered the acceptance of the images and doctrines of design, ... [and] strengthened the position of design in relation to economic, social and political intercourse' (van Toorn 1994: 150). But what suffers in this process is the relation to those whom, ostensibly, design serves. While design still wishes to 'claim responsibility for the interests of users,' and presents its 'professional and private concerns as a public interest,' 'under the pressure of neo-liberalism and the power relationships of the free market,' design has been 'forced to dilute the public wine with a large dose of private water.' In this process not only is the designer's individual freedom, ostensibly

still existing within a space of its own, infiltrated by the client's way of thinking, but design ends up discovering that, for all its attempted accommodation with these interests, it has become little more than a handmaiden to market concerns. Small wonder then (as van Toorn puts it in his most incisive criticism) that even at best design serves today as little more than a 'theatrical substitute for [missing] essential forms of social communication' – whilst at worst, 'drawing on its roles in the organization of production and in helping to stimulate consumption', it is at once hand-in-glove with the intensifying creation of a fundamentally unsustainable world (a role it is incapable of acknowledging with any honesty) and part of the 'extensive disciplining of the general public' in the terms of the market – a disciplining 'whose most far-reaching consequence is ... a political neutralization that is at odds with the functioning of an open and democratic society'. See the essays 'Rethinking the Visual: Essayistic Fragments on Communicative Action', in Ole Bouman (ed.) *And Justice for all*, Maastricht: Jan van Eyck Akadmie (1994); and 'Communication Design: a Social Practice' in Jan van Toorn (ed.) *Design beyond Design*, Maastricht: Jan van Eyck Akadmie (1997).

¹⁸ We are faced with a permanent future world crisis because the move to a world in which the artificial and not nature is now the prime horizon, medium and condition of existence is irrevocable. This means that unsustainability is a continuing possibility for every future to society to come. We have reached a historical point where we have no escape from the possibility of 'de-futuring' and this would be true even if we achieved, in some locations, in some places, a 'sustainable' economy. On thinking 'crises' beyond the concept of crisis, see Janet Roitman, *Anti-Crisis* (Durham, Duke University Press, 2014). I Some of these points are dealt with in more depth in the essays in Clive Dilnot, Tony Fry and Susan Stewart, *Design and the Question of History* (London, Bloomsbury, 2014, forthcoming).

¹⁹ We are certainly not assured of the future as in any sense "progress" on what we have now, if by progress we mean here development towards a more humane, equal and sane world. The term means also that we are in danger of losing hope in the future except as the extrapolation of what-is.

²⁰ On 'de-futuring' see the recent trilogy of books by Tony Fry, *Design Futuring; Design as Politics; Becoming Human by Design* (London, Bloomsbury, 2009, 2011, 2012).

²¹ All history is of course written with an eye to the future. But today the emphasis called for is new; the change can be seen by considering a famous line from Walter Benjamin. In 1940, in one of the "Theses on the Philosophy of History" Benjamin wrote that only those historians who are 'convinced ... that not even the dead will be safe from the enemy if he is victorious' would have 'the gift of setting alight the sparks of hope in the past.' In the light of what is emerging we might re-write this line to lay emphasis not only on the necessity of 'saving' the dead but the unborn. It is today their possibility that we need to seek to protect.

²² 'Although I designed hundreds of successful products for major corporations, it suddenly occurred to me that I didn't understand

what I had been doing...' – the US designer Jay Doblin in an interview from 1980.

²³ To see design beyond "Design" is one of the intellectual challenges of now.

²⁴ Latour, *ibid.* In referring extensively to this paper below I shall not further cite it. The paper is available on-line at <http://www.bruno-latour.fr/sites/default/files/112-DESIGN-CORNWALL-GB.pdf>.

²⁵ Cf. Latour: 'Yes humans have to be artificially made and remade, but everything depends on what you mean by artificial and even more deeply by what you mean by "making."' ¹

²⁶ Nothing much is left of the scenography of the modernist theory of action: no male hubris, no mastery, no appeal to the outside, no dream of expatriation in an outside space which would not require any life support of any sort, no nature, no grand gesture of radical departure – and yet still the necessity of redoing everything once again in a strange combination of conservation and innovation that is unprecedented in the short history of modernism.

²⁷ See Herbert Simon, *Sciences of the Artificial*, *ibid.*, p. 113.

²⁸ Latour's instance comes design as a mode of acting vis-à-vis reconciling the "impossibilities" of ecological politics. How can we draw together matters of concern so as to offer to political disputes an overview, or at least a view, of the difficulties that will entangle us every time we must modify the practical details of our material existence? We know that whenever we prepare to change our fixtures from incandescent to low energy light bulbs, to pay our carbon expenses, to introduce wind farms, to reintroduce the wolf to the Alps, or to develop corn based fuel, immediately, some controversy will be ignited that turns our best intentions into hell. And we are no longer able to stop the controversies by stating the undisputable facts of the matter because facts are constantly disputed.

²⁹ On the latter see the early work by Giorgio Agamben, *Man Without Content*, especially chapters 6–9 (Stanford, Stanford University Press, 1997).

³⁰ I say 'problems and weaknesses' but as I note below Latour, essentially a social philosopher of Science, has to be congratulated on attempting to think design. The sneering response that I know some made to this paper is wholly unwarranted. In the context of the wholly limited atmosphere, and what we might call the 'scope,' of the study of design Latour's deceptively simple points radically open thought – if nothing else as a challenge to what is called thinking in design to think itself more adequately and in the context of what is now emerging.

³¹ This term, which cannot possibly be rendered by "use" or "function" or any of the other reductive alibi's that have been used to dismiss how things act, is central to the question of history, as to the question of design as act and capability. To explore the workings of things in, across and through history is surely what the history of design is about.

³² Take for example the hyper-modernist proposals of Ludwig Hilberseimer in the 1920s.

³³ A starting point for those interested in this topic is John Heskett, 'Design in Inter-war Germany,' in *Designing Modernity: The Arts of Reform and Persuasion*, published by Thames & Hudson and the Wolfsonian Foundation, London and New York, 1995. In more depth Auschwitz, by Deborah Dwork and Robert Jan van der Pelt, New York, Norton, 1996. Thought in relation to ethics: Gillian Rose, *Mourning Becomes the Law* (Cambridge, University of Cambridge, 1996).

³⁴ In the splendid rhetoric of the introduction to *Design for the Real World* (orig. 1971) (Chicago, Academy Chicago Publishers, 1984).

³⁵ Latour: 'If the whole fabric of our earthly existence has to be redesigned in excruciating details; if for each detail the question of good and bad has to be raised; if every aspect has become a disputed matter of concern and can no longer be stabilized as an indisputable matter of fact; then we are obviously entering into a completely new political territory.'

³⁶ I have left to one side some of the propositions found in the final third of Latour's paper, that deals with the philosophy of Peter Sloterdijk and the insights the latter might offer for design.

³⁷ In the essays in the jointly authored book referred to above and in the chapter "'Why the Artificial May Yet Save Us,'" in *Design as Future-Making*, ed. Susan Yelavich & Barbara Adams (London, Bloomsbury, Fall 2014)

³⁸ This circularity works equally from the side of theory (or methodology, it comes to much the same thing). The idea that theory—or today "research" since the latter dares scarcely to use the former term—should be conducted in the absence of historical perspective is, I hope, already discredited. Here the "futurological" model that Latour embryonically constructs adds in the dimension of time without which no model of designing, in its capabilities or attributes, can be adequately secured.

³⁹ Latour: 'Critique, deconstruction and iconoclasm, once again, will simply not do the job of finding an alternative design. What is needed instead are tools that capture what have always been the hidden practices of modernist innovations: objects have always been projects; matters of fact have always been matters of concern.'

⁴⁰ Herbert Simon, *The Sciences of the Artificial* (Cambridge, MIT press, 2001) p. 164. I take Simon's proposition to indicate the search for the manners and modes—the forms—of meeting material and immaterial human needs, well. On the search for these, and the politics of so doing, see the essay by Stephen Yeo, Stephen Yeo, 'State and anti-state: Reflections on social forms and struggles from 1850' in Philip Corrigan (ed.) *Capitalism, State Formation and Marxist Theory* (London, Quartet, 1980) p. 115.

⁴¹ We tend to forget that while we tend to read the act of "re-looking" as merely the act of giving a 'new and better "look" or shape to something' such re-looking may not be as banal as sometimes thought. We should be cognizant first of all of the manner in which we use the term to 'give' a look to something (what, then is the gift here? Is it negligible or significant?). Second of all we should pay

more attention to Heidegger's little formulation regarding world views and things: that the former gives to things their look and men their outlook—which means also of course that this 'outlook,' to be operative in the world, cannot but be encapsulated in the form, which is to say in part the look, of things. Looking is less innocent than we often wish it to be. Equally of course, in many commodities, we may think there is less than meets the eye; but then every commodity unavoidably contains the outlook of the entirety of capitalism.

⁴² Originally published in the *Times Literary Supplement* for 24 May 1974. Historians of design should also look at the essay that accompanied Clark's in the same issue, Joseph Rykwert's 'Art as Things Seen.'

⁴³ Lukács, *History and Class Consciousness*, *ibid*, p. 153

⁴⁴ Though significantly Riegl especially, but also in Dvorak (who was Riegl's student) were at least in part historians of what was then called applied art.

⁴⁵ This is far too simple of course. Yet in a crude way it gets at what is involved here. For a more complex reading see especially chapter 10 of Jean Baudrillard, *Towards a Critique of the Political Economy of the Sign* (St Louis, Telos Press, 1971).

⁴⁶ Martin Heidegger, 'The Age of the World Picture' in *The Question Concerning Technology and Other Essays* (New York, Harper, 1977).

⁴⁷ Theodor Adorno, *Negative Dialectics* (New York, Continuum, 1973) p. 186.

⁴⁸ (<http://www.oxo.com/p-223-swivel-peeler.aspx>)—

⁴⁹ Theodor Adorno, *Negative Dialectics* (New York, Continuum, 1973) p. 186.

ANNA CALVERA

University of Barcelona
Spain
annacalvera@ub.edu

HELENA BARBOSA

[ID+] Research Institute for Design, Media and Culture
Department of Communication and Art
University of Aveiro
Portugal
helenab@ua.pt

5

INTERTWINING HISTORIES OF DESIGN STEP ONE: PORTRAYING THE MAP OF PRESENT EUROPEAN DESIGN HISTORY THROUGH 10 ICDHS CONFERENCES (1999–2014)*

71

*TEXT ORIGINALLY PUBLISHED IN: WONG, WENDY; KIKUCHI, YUKO;
LIN, TINGYI (EDS.) - 10TH CONFERENCE OF THE INTERNATIONAL
COMMITTEE FOR DESIGN HISTORY AND DESIGN STUDIES – MAKING
TRANS/NATIONAL CONTEMPORARY DESIGN HISTORY. PROCEEDINGS
BOOK. SÃO PAULO: BLUCHER, 2016. ISSN 2318-6968. P. 145–151.

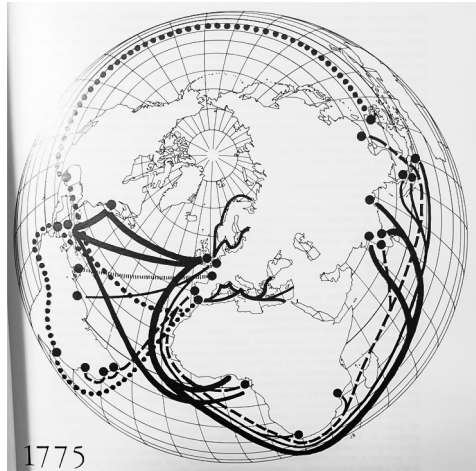
ABSTRACT

After the 10th anniversary of the ICDHS Conferences, this paper recalls and expands upon the European Province workshop held two years ago to address a transnational approach to reviewing the many histories of design that have emerged at these conferences. We have restricted the focus to Europe. This represents a first step in a wider research project aiming to rewrite the European history of design, comparing and intertwining all these peripheral histories that have emerged and, thus, establish the wider history. The project also assumes a previous task: to clarify what we actually mean nowadays by Europe. The aim is to draw the boundaries of a cultural, technical and aesthetic territory, a map of Europe based on what we have learned from the ICDHS conferences, and to think about it. This is the central argument of this paper.

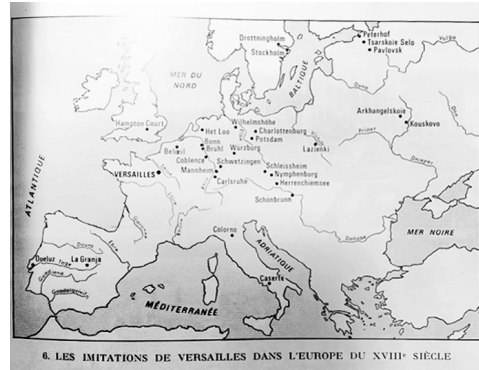
Keywords: European Province, transnational history, Braudel, histories of design, ICDHS

**STAGE 1: HISTORY PROVIDES
A WAY TO PRESENT EUROPE**

When a research project starts in the Humanities and Social Sciences fields, it is convenient to carry out an early task of clarifying concepts and defining the basic notions needed to achieve a comparison between different historical realities, whether local, national or regional. It is also convenient to provide ideas for understanding what might be shared within a large or multidisciplinary team. This is the process when a transnational approach is adopted to reviewing different histories of design already developed locally by national researchers that deserve to be compared to establish the wider history. We realised that while setting up a project of a compared study on European histories of design, we were applying a transnational approach to European history. As such, it is an ambitious and large project. In the planning, a series of connected issues reared up regarding the current map Europe and the conceptual boundaries outlining the Continent: what is Europe nowadays? How large is



Map 1. European presence around the world, 1775. Braudelian chart representing the pepper trade routes, made to visualize the growing potential of London and also traffic developed from the Netherlands, France, Spain and Portugal. For Baltic and Mediterranean seas, it conveys the more frequent itineraries (Braudel 1979 Vol. III, p. 19).



Map 2. The way in: Europe's shape inherited from history. Imitations of Versailles: another Braudelian map exemplifying the spread of cultural movements across Europe, 18th century. Note the buildings in San Petersburg and Moscow, and the void of the area still under the Ottoman Empire. Thus it is easy to define a European territory not dependant on current political borders. (Braudel 1979, Vol. III, p. 53).

the European territory at present? How many different cultures, languages and ways of living comprise the current idea of Europe? In short, what are we talking about when we say "Europe" right now?

A related issue soon arose while researching the answer to the current economic and political reality as reflected by newspapers, general surveys and political press: are the administrative borders established politically by the 28 European Union (EU) useful enough for historical research? Do the existing borders outline Europe and its mental image? This is an old question: Fernand Braudel, for instance, in 1955, while writing in Brazil for a Brazilian audience, introduced many different worldwide regions calling them "Europes" ("*car il y as dans le monde cinq ou six Europe*", Braudel 2001: 133). He mentioned zones culturally born and influenced by old Europe through colonization, but warning "*La vieille Europe don't les*

limites à l'est sont à fixer" (The old Europe whose boundaries east are still to be fixed [2001: 133]). More than fifty years later, as far as our research proposal progressed, east boundaries were blurring even more – Braudel was not strengthening the usual Eurocentric approach, but rather he encouraged these other areas to feel free, adopting a similar view to studying their own countries as this one adopted by European historians when they talk about themselves and their own history.

Assuming that a helpful frame to work upon may be sought in historical thought, last year we looked at a map of Europe embedded in exemplary works by Braudel and the idea of Europe bequeathed by him when he studied the world through the early modern centuries. In fact, this was just one hypothesis giving rise to the research project mentioned above, "Intertwining European Histories of Design".



Map 3. The shape of Europe by its inhabitants: The east is clearly blurred. Map from Ortelius's *Theatrum Orbis Terrarum*. Ortelius's Europe was modelled after an earlier wall-map made by Mercator. It should provide a useful depiction of the Continent for merchants and statesmen of the time. Published in London, 1606.

Table with the 50 countries of Europe according to the old State Nation									
Albania	Andorra	Armenia But physically placed in Asia, Middle East borders	Austria	Azerbaijan But physically placed in Asia, within Middle East and Persian area of influence	Belarus	Belgium	Bosnia & Herzeg.	Bulgaria	Croatia Organising design awards (BIO)
Cyprus zBoth parts or just the Greek one?	Czech Republic	Denmark	Estonia	Finland	France	Georgia (north of Caucasus) A part of the old European USSR	Germany	Greece	Hungary Activities related to design practices even before WW
Iceland	Ireland	Italy	Kosovo	Latvia A designers association, design schools	Lichtenstein	Lithuania Almost 3 design high schools	Luxembourg	Macedonia	Malta
Moldova	Monaco	Montenegro	Netherlands	Norway	Poland	Portugal	Romania	Russia (West from the Urals)	San Marino No one university; no one school of design, the ISIA Urbino is the closer vocational high school of design
Serbia	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	Vatican No one university; no one school of design

Schema created at the turn of 20th Century. It is a development made after the original table included in Jonathan M. Woodham's paper at The European Province Workshop (Aveiro, July 2014, p. 715). Apart from membership to the UE, we considered their participation at ICDHS events. LEGEND: Written in grey: Countries of Europe (50); written in black Member Countries of the EU in 2013; written in italics, European countries that presented papers at one or more ICDHS Conferences. Smaller size: comments by the authors on these countries.

Table 1. The way out: who actually forms present Europe?

It might be the map that described Europe when the preliminary industrial revolution was already going on and, so, when modernity as a historical era started. This map should help us to avoid key questions, like the inclusion in the map of neighbouring territories such as Turkey, Russia and Israel, for instance, to mention only the most controversial countries, when considering the more restricted European area of influence. According to Braudel's sense, current Europe can be defined as a world region because it can be identified as an area whose unity depends on the network of exchanges and relationships of all kinds, which gave her its constitution regardless of state sovereignty (Chartier 2001: 119–20).

Being very prudent, the main goal of this paper is actually to draw a first portrait of a map that may suit a transnational vision of the global region and its twentieth century history of design. Related aims are to understand how ICDHS international conferences profiled this map and are advancing a new vision of the history of design in Europe, checking the idea of a European Design as well. The former intention of the paper was to compare the two maps, the former that gave way to modernity, and the latter providing a way out.

INTERTWINING IN THE HORIZON

1999 Barcelona: *Historiar des de la perifèria, Història i històries del disseny*

2000 La Habana: *La emergencia de las historias regionales*

2002 Istanbul: *Mind the map!*

2004 Guadalajara (México): *Coincidencias / Co-incidencias*

2006 Helsinki : *Connecting*

2008 Osaka: *Words for creation, words for design*

2010 Brussels: *Design & / \ Vs Craft*

2012 São Paulo: *Design Frontiers: Territories, Concepts, Technologies .*

2014 Aveiro (Portugal): *Traditions, Transitions, trajectories: major or minor influences.*

2016 Taipei (Taiwan)

Figure 1. ICDHS titles

Ten years of regular meetings around the world amounts to a solid and significant background for a project on transnational history such as that which we decided to plan. Of these ten conferences, nine of them established in their motto, title or theme a call to propose aspects that would establish links and points of comparison, even collaboration, between the many local and regional histories appearing as the conferences continued, and more people would join them (see Fig. 1): Guadalajara '04 and Helsinki '06 stated it clearly. Other mottos drew attention to all these other histories being added to the map of the discipline and its related scientific community. They gave way to issues previously forgotten or set aside in the old general history of design. Keywords used frequently include: the plural for history and the emerging of the others; the geography of design history and the need to observe the evolution of technical terms applied to design, recalling traditional words still active and relating to material cultures (Osaka '08 Beyond Westernisation, Brussels '10 Rescuing the Western Vision). All of them demonstrate a strong commitment to what is often called the ICDHS's inclusive spirit, evident since the first edition. It became consolidated because IC-

DHS's main aim in this first phase was to discover and meet new colleagues coming from all around the world. From that point of view, ICDHS performs the role of "loudspeaker" for design history developed around the world, using a metaphor proposed by Braudel a long time ago and referring to research done in peripheral areas (2001: 244).

Another interesting precedent for a transnational approach to Europe worth mentioning here is The European Province Workshop held two years ago at the 9th ICDHS. Planned to introduce the issue of reviewing the role of Europe in the usual version of the general history of design, the call invited thinking about two main topics, one labelled as domestic affairs, the second as foreign affairs. This was to consider, firstly, both the challenges and opportunities of writing the specific histories of European marginal areas; then, secondly, the role of current Europe in the globalised world of design and its culture. Some issues were then identified as unresolved. Considering a possible common history, the variety of very local languages appeared soon as a major obstacle both to researchers that wished to inquire

abroad (this is the case of languages spoken across Mitteleuropa — to use an old-fashioned word — and the Baltic and Mediterranean neighbourhoods), and to local historians trying to disseminate their research outcomes abroad, and enrich the very well established mainstream ways of working. It is a path back and forth and, thus, a flux to inquire about while observing how a scientific and specialized community of experts is being built up whether across Europe or the whole world. Later, several self-accepted provinces reviewed the advantages and strategies used having taken this condition on. While Spain and Turkey reinforced the need for a comparative approach between local issues and a wider common history — a danger for regional historians is a lack of consensus on crucial issues, claimed Tevfik Balcioglu — Denmark and Finland noted different ways of acting as a peripheral culture while building up their specific identity within the European map at the same time. Anders V. Much displayed three options to managing the peripheral

character: to perform as an autonomous centre; as a voluntary chosen periphery or, rather, as a pure and sound province the result of self-exoticization — an interesting approach. From Finland, Pekka Korvenmaa raised the issue of provinces being culturally creative, innovative and original. He reminded us of the spread of Art Nouveau across many provinces of Europe, a hypothesis already proposed by Mireia Freixa too. Clearly it is also worth noting the spread of modernist ideals after WW2, having won the war against visual classicisms manifested in European fascisms. But we were also reminded of another phenomenon that is socially and culturally very interesting, and peculiar to post-modern times: the originality of young cultures emerging in urban suburbs, far away from the high cultured and well-established town centres. This happened when the first punks and their cultural output reached the cultural panorama all over Europe.

MAPPING DESIGN IN EUROPE THROUGH ICDHS

ICDHS . European Participants of each Conference 1999-2014										total participants per country
	Barcelona 1999	Havana 2000	Istanbul 2002	Guadalajara 2004	Helsinki/Tallinn 2006	Osaka 2008	Brussels 2010	São Paulo 2012	Aveiro 2014	
Austria										1
Belgium				1	1	4	15	4	7	32
Croatia							1	1	1	3
Denmark			1	3	4		2		5	15
Estonia			1		2	1	1	2	1	8
Greece			3	3	1	1	1			9
Finland			6	3	17	5	4	3	2	40
France					1	1	3		1	6
Germany		2	3			1	3	1	2	12
Hungary			1							1
Iceland									1	1
Ireland			1						1	2
Italy	1		3		7	6	8	6	3	34
Netherlands			3				39	1	2	45
Norway					3		2	3	4	12
Poland			1	1						2
Portugal	2	2	10	5	4	6	2	6	117	154
Russia							2			2
Spain	48	20	9	4	8	14	9	3	10	125
Sweden					10	2	2	2		16
Switzerland			1			1	2		2	6
Turkey	1	1	42	5	2	4	8	5	12	80
UK	5	6	37	9	2	13	33	12	12	129
Total of participants										734
Total participants per conference	57	31	122	34	62	59	137	49	183	734
observations	9 Europe 48 Spain	31	80 Europe 42 Turkey	34	26 Europe 19 Scandinavia 17 Finland	59	83 Europe 39 Netherlands 15 Belgium	48	96 Europe 117 Portugal	

Table 2. Total participants at ICDHS venues (1999–2014).

Built after every venue. See www.ub.edu/gracmon/icdhs. We consulted that table and amended some data in preparing this paper.

To carry out this task, we used ICDHS Proceedings and Abstracts books as a key source of information about the sort of European history of design that has taken shape in this specific scientific context. Here again, this is a first step in a research process concerning ICDHS's legacy. It permitted us to gather enough data to draw several maps on the current situation of DH & DS. The study of ICDHS's concerns, participants, themes and contributions offers a lot of significant information regarding the evolution of the discipline of design history, but to comment all of them would go beyond the scope and purpose of this article. Here we focus just on papers related to European issues.

Viewing the data rendered by ICDHS, it was important to realize which countries participated regularly and their representativeness. Being a conference that seeks to embrace global participation, and counting on the presence of 49 countries through to 2014, in this first phase of research we considered Europe as a starting point. But remember: what should be Europe at present? It includes the territory defined by physical geography as a continent: from the Atlantic to the Urals, from the Arctic Circle to the Mediterranean and the Caucasus. It comprises 48 states and many more nations but excludes the Anatolian area of Turkey. However, looking at ICDHS's most frequent attendants, the territorial boundaries proposed by this study integrate some countries not belonging to the EEC: Iceland, Norway, Russia, Switzerland and Turkey. In the latter case, because of the frequent and continued presence of scholars coming from Ankara and Izmir, Turkey has been included in its entirety.

We know there are a lot of constraints in drawing a map that may undermine the credibility of information gathered just from the attendance data of a conference where peer evaluation of quality is active and powerful. There are other factors too that impede a real perception of what is happening at the European level just from these conferences. Economic policies of universities often prevent people from attending conferences held far away. It is known that there

is widespread interest among many participants from different countries that were unable to attend due to lack of funding. On the other hand, accepting English as the only language of the conference raises another barrier; to attend depends on idiomatic skills while speaking fluently in a foreign language. It is easy to check this factor by the assiduous presence of countries accustomed to speaking English daily. These situations have a tremendous impact on the results presented. From participation at ICDHS events, we only gather information those scholars who, being able to express themselves in English, are often experts on Western issues. This means that the display of content offered by these maps always represents a fragmented vision of what has actually happened, whether in the past or the present, in so many places even in Europe. Nevertheless, the information collected is important to configuring a schema of what has been going on nationally in the field of Design History across the Continent since 1999. In fact, a similar approach to the information could be prepared locally, addressing the most active towns and researching their relationships.

For a better understanding of this data it has been necessary to draw several different maps and illustrate specific situations. These maps indicate the epicentres of participation and production in terms of papers per conference and also by the total number of conferences. Let's consider some of them. Firstly, in two distinct maps and using concentric circles, we can see the face-to-face dimension of the presence per country at each conference (Fig. 2), and in the second map we can see the total number of participants at a specific conference (Fig. 3). We reproduce the maps for the Aveiro 2014 conference as an example. Similar maps have been produced for every venue. Secondly, the same procedure applies to the creation of two other maps, which show the number of papers presented per country (Fig. 4), identified by the number of circles, which is less than the number of participants compared with the previous figure, and the total number of papers presented at all conferences (Fig. 5).



Fig. 2. Countries participating at the 1st ICDHS, Barcelona 1999.
The international impact of the first event in Barcelona was high. Information about what happened was requested from many places overseas.



Fig. 4. Papers presented at ICDHS Aveiro 2014
Each circle represents 1 to 5 participants



Fig 3. Attendants at ICDHS Aveiro 2014 / countries
Each circle represents 1 to 5 participants



Fig. 5. Total number of papers presented at ICDHS (1999–2014).
Each circle represents 1 to 5 participants

This data gives us an idea of the actual representativeness of every country in terms of the number of papers presented, and allows us to identify who is in the map, at least during the period of existence of ICDHS (Fig. 6).

To visualize and compare the weighting of every community of scholars, we draughted a new map using the size proportion of every country, taking into account the number of participants. For example, the size of Spain grows 125% given its participation of 125 delegates. Similar percentages were applied to all countries based on the number of participants per conference (Fig. 7).



Fig. 6. Countries participating at ICDHS (1999–2014)



Fig. 7. Weighting according to ICDHS delegates

READING THE MAPS

Through this distort map, it is easy to appreciate that the countries highly present at the forum were Portugal, Spain and Turkey, all located in southern Europe. In addition, the UK and the Scandinavian countries clearly stand out. The central part of Europe features a reduced expressivity but it is not totally non-existent. Some Croatian, one Hungarian and a couple of Polish scholars joined several conferences (3,1 and 2 respectively). Italy and Switzerland were also there although occasionally. Hence, according to the statistical data and as seen from a national point of view, the portrait of current European DH & DS emerging through ICDHS's activities is unbalanced. Provinces around the perimeter look very active and have been quite regular, while there is some significant variation throughout the years. The resulting picture might be assessed observing towns, or rather strong universities, higher education schools or bodies supporting delegates. While it may be a coincidence – just a hypothesis – perhaps the implementation of the Bologna process in higher education might have led to increased interest in history and theory.

Highly significant is the powerful, constant and regular presence of the UK – remember the DHS collaborated with ICDHS many times. This case is unique, as the British DHS has a long history, together with a large critical mass of active teachers involved. This also explains why Anglo-Saxon ways of acting and standards of rigour increased progressively and subtly in that forum too.

Then, we must remark on the low presence of big Western countries with historically considerable national design industries. Both Germany and France hold a firm place in the European history of design. They have a critical tradition too. Does this imply that Design History is not a cultivated discipline there? The foundation of a Society of Design History in Germany (GfDG 2007c) was recent. It could be that GfDG have

a narrow scope focused mostly on domestic issues. Concerning France, there is a very active community in both Design Management and Design Research fields. A few years ago the *Ateliers de la recherche* started up with a sturdy Francophone interest. Despite French emblematic museums – such as the Georges Pompidou – and the existence of collections closely related to design, and plenty of design high schools all across the country, design history seems still to be a marginal consideration.

So, to conclude, both the maps of design history and of the history of design varied significantly over these years. Recall the 1985 Boiler House Project: 'National Characteristics in Design'. Countries considered were Britain, France, America (this is USA), USSR, Italy, Sweden and Germany. For the rest, to draw maps from the data of the ICDHS and propose a configuration of Europe through the eyes of these events, it is necessary to understand the already existing fluxes between countries. One further task to do is to survey and map the themes papers most often dealt with, in order to observe the convergence of interests and common issues. It would help to demonstrate the interesting hypothesis launched in Aveiro: the existence of very creative and innovative peripheries.

REFERENCES

- Braudel, F. (1979) *Civilisation Matérielle, Economie et Capitalisme, XVe–XVIIIe Siècle*. 3 Vols. Paris: Armand Colin.
- Braudel, F. (2001) *Les écrits de Fernand Braudel. L'Histoire au quotidien*. Paris, Fallois.
- Chartier, R. '(2001) La conscience de la globalité'. *Annales HSS*, January–February, 2001, no. 1, pp. 119–123.
- Delanty, G. (2003) 'Is there a European Identity?'. *Global Dialogue*, Vol. 5, no. 3–4, Summer–Autumn 'The Future of Europe'.
- Farias, P.L. and Atkinson, P. (eds.) (2014) *Design Frontiers. Territories, Concepts, Technologies*, Selected papers from 8th ICDHS São Paulo, México, Designio; proceedings CD for the 8th ICDHS Conference, São Paulo.
- ICDHS' Proceeding and abstracts books: <http://www.ub.edu/gracmon/icdhs/>

ANNA CALVERA

University of Barcelona

Spain

annacalvera@ub.edu

6

A GENERAL FRAMEWORK. FROM DESIGN FUNCTION TO DESIGN FACTOR: THE HYPOTHESIS OF THE THREE ORIGINS OF DESIGN APPLIED TO THE CASE OF BARCELONA *

83

*PAPER ORIGINALLY PUBLISHED IN: CALVERA, ANA (ED.) – FROM
INDUSTRY TO ART. SHAPING A DESIGN MARKET THROUGH LUXURY
AND FINE CRAFTS (1714-1914). ESSAYS ON LOCAL HISTORY.
BARCELONA: GUSTAVO GILI, 2013. ISBN 9788425225956. P. 17-48.
TRANSLATION BY CHRISTOPHER DELL.

Disseny, diseño: "Design is the design of a design to produce a design"¹.

If anything distinguishes and characterises Barcelona design culture, it is the use of a specific word, in Catalan as well as in Spanish, to refer to it. The words *disseny* and *diseño* are used in various contexts. Sometimes they define a specific economic sector and its market, as well as the discipline that inspires a particular practice (in which case it is a simple noun); at other times the word denotes the role played by certain professionals, the activity carried out, and their way of thinking (in which case the word is a verb defining both action and competition). Sometimes the words refer to what the designers do, the result of their work, in which case the word is a noun that, historically, has often been confused with the term *dibujo* (sketch or drawing), because of the tools that designers use to express ideas and communicate; and finally, the words can also refer to objects resulting from their activity (again, a noun that becomes an adjective to designate a way of being of certain objects, that extra

something that distinguishes them from other goods found in the market). That the word "design" has so many meanings within a particular area of activity can be explained by historical reasons, as is discussed throughout this chapter.

The Spanish and Catalan words *diseño* and *disseny* have a peculiar history that derives from their being neighbours and having a common history, being practically parallel to but slightly different from their closest relatives, such as the Italian *disegno*, the English *design*, the French *dessin* and *dessein*, and the Portuguese *desenho*.

As regards Barcelona specifically, the term *disseny*, comparable in all regards to the Castilian *diseño*, has a very special history due to the many challenges the Catalan language has faced in developing normally in modern times². Now, according to Oriol Pibernat, who has studied the uses of the word since the Castilian Golden Age (the "Siglo de Oro")³, the adoption of the word in Catalan and its dissemination

in the eighteenth century may be considered the direct result of influence of Spanish. Now, whether in Spanish or Catalan, it is certain that Barcelona was already using the word *diseño* (design) in the eighteenth century, albeit in a very particular context and with a meaning that is still difficult to pin down, especially if we compare it with today's meaning. It was then that this word began to differentiate itself from *dibujo* (drawing), a term that it had been related to since Mannerism; and its use at least points to the fact—and this is the important part—that even then there was a need to differentiate between the two practices: design, the planning related to industry and mechanical arts, and the technique of drawing as a manner of representation, considered a suitable artistic practice. The writings of enlightened authors are very revealing in this regard given that forward-thinking Spanish politicians were considering the possibility of undertaking an industrialisation programme that would have focused on developing domestic employment rather than promoting the concentration of large factories⁴.

Moreover, establishing royal factories to ensure the supply of high-quality industrial artisan products to the court during the final period of the Ancien Régime⁵ made design a topic of academic debate throughout Spain, although it was quickly relegated as a minor issue in favour of a much more pressing and urgent issue at the time, the conceptual and practical consolidation of the Fine Arts system. It is thus not surprising that in the nineteenth century—the golden age of Spanish academies—the word *diseño* (design) was dissolving and disappearing in the face of the ubiquitous *dibujo* (drawing), thanks to the efforts of the Fine Arts Academies. In fact, it was not until the mid-twentieth century that its current meaning was fixed, when Barcelona designers organised themselves in 1960 and 1961, making their profession known and joining the international mainstream. At this moment, the word *disseny* infected the Spanish language, in its popular translated form *diseño*. By then, the words *disseny* and *diseño* were philologically available to designate that profession that was exploding as

something totally new and willing to break with a past and a production system that seemed economically, socially and culturally obsolete. Given the evolution that occurred in the nineteenth century, one might ask why in Castilian and Catalan, unlike other neighbouring Romance languages, it was the words *dibujo* and *dibuix* that won out, rather than the term phonetically closest to the original Italian *disegno* to refer to this form of graphic expression. This is only a hypothesis, but in my view, the failure of the word *diseño* to take off was to condition the nineteenth-century debate on the regeneration of the industrial arts as seen in Barcelona between 1851 and the peak of the Modernisme movement (1890–1900). In effect, the link that was lost in the process was the recognition of design as being practical and aesthetic, heir to the tradition of the industrial arts, but complementary to and distinct from the activity of the decorative or applied arts—which greatly delayed its recognition as a separate profession with its own criteria.

In Barcelona there has been much discussion about the meaning of the word *diseño* as it has been used in different periods and there are conflicting interpretations⁶. In general, according to use in the eighteenth century, the most common is to highlight the synonymy between *dibujo* (drawing) and *diseño* (design). But in my view, the dominance of the term *dibujo* in the nineteenth century, evident, for example, in the discussion on applied and decorative arts throughout the century, necessarily refers to the precedent of the previous century and the emergence of the word in the context of industrial transformation then experienced by many economic sectors. In turn, the recovery, semantic reorientation and popularisation of the word *diseño* in the mid-twentieth century obliges us to review the possible connection with earlier uses and the social practices from which it was born. During the long period of time when modernity was in gestation, many words changed their meaning “without warning”, as Marc Bloch observed. Thus the research has taken into account the uses of the term design as a possible historical reference and, where possible, has

attempted to trace its evolution. For now we may say that, in the history of Barcelona, these changes of meaning have coincided with those moments of historical transition that have announced what would be the current design phenomenon. Many of these transitions can be regarded as having a dual impact on the origins of design since they have both given new meaning to the word and to the conception of the activity it covers.

Where to begin? The possible historical origins of design in a single place. When inquiring into the historical origins of design in a foundational sense, the view that still dominates is that popularised by Pevsner in 1936, which sees everything in terms of the intense debate on the use of machines in Europe between 1880 and 1914. This view implies firmly taking sides, favouring a concept of design as an innovative and aesthetic creative practice related to industry and technological innovation. Around 1910 the *Deutscher Werkbund* defined the task of design as humanising technology. This is the idea of design that was inherited by, but also bequeathed by, the historical avant-garde, because its self-justification depended upon it. It was reworked by ICSID during its first years of existence and in the 1960s was spread internationally as an expression of modernity. Its main features are: linking the concept of design with the culture and social experience of modernity, historically and culturally speaking; its reliance on the industrial system of production, distribution and consumption; its peculiar way of both being and undertaking an aesthetic practice; and finally, constituting itself as an actual profession—which is to say, a paid economic activity whose performance is not comparable to the practice of a trade or craft.

Each of these features naturally involves a selective choice and leaves out of the universe of design and its culture many other similar, proximate, or at the very least, related phenomena. In one case, it excludes everything that was produced before the contemporary era; in another, everything planned and produced by traditional methods, as well as craft

products; in a third, all that which, although produced industrially, does not meet certain defined levels of quality, or does not correspond to what is expected of good design and aesthetic practice, regardless of its style; and finally, all activities, including working through a design process, that have not been done professionally (that is, the design workers has not been paid a specific fee) also fall outside of the definition of “design”⁷. To summarise, “design is the design of a design to produce a design”, as Heskett said at the beginning of the article.

But precisely because they involve a selective choice, these same criteria well serve to establish the historical origin of design and culture in a local context. In addition, depending on the point of view adopted, the various possible origins may not coincide in time. Indeed, each of these meanings refers to a distinct historical process, each with its logic and its period of time, whether short, sudden or very long, marked by a series of events that are the only ones that can be dated with precision. From this range of features is derived the hypothesis of several different historical origins of design.

For example, if we accept that design is a profession, the changes in work processes by which some ancient trades were gradually professionalised occur over a period of at least two centuries, and we can only give a date with any certainty to the completion of the transformation. In Europe, the sign that this process had been completed, thus beginning a new era, came with the abolition of the guilds and the establishment of schools open to the public, developments that, at least in Barcelona, were preceded by social crises and legal battles throughout the eighteenth century. These particularly affected the guilds related to the art trades, a sector in the midst of a transformation into the Fine Arts, marked by the emergence of the academies and, in the case of Barcelona, by the founding of the *Escuela Gratuita de Diseño* (Free School of Design, 1775) for the training of artists⁸. It is true, of course, that in Spain at least a century passed between the time of deauthorising the guilds and

that of dismantling and eliminating them. Their final abolition in 1836 confirms the end of the Ancien Régime in Spain⁹. In this respect, any observation on the professionalisation of design must focus on a historical cycle of considerable length to be able to observe the signs of an increasing demand for specific professionals that could take charge of a function integrated into the overall production network.

Something similar happens if we look at the relationship of design to the industrial system and its place in the dynamic of production in terms of how the structure of the workforce in companies changes from the time of the Ancien Régime to modernity. In this case, too, we need to think in terms of long spans of time. This period includes several historical cycles and distinct phases in the process of industrialisation. Specifically, these are: a first phase regarded as proto-industrialisation (or in Marxist terminology, the manufacturing stage); a second phase prior to full industrialisation that prepares the way for it, which involves the establishment of a network of factories; and finally, the phase of mechanisation and the Industrial Revolution itself.

Hispanic historians have argued considerably over the long process by which Catalonia became the "factory of Spain" in the mid-nineteenth century¹⁰. From an initial interpretation that clearly pointed to the failure of the Industrial Revolution in Spain, focusing on the cotton industry, research has begun by reviewing the changes in the eighteenth century, thus confirming the validity of the concept of proto-industrialisation to explain the historical significance of the calico factories in Catalonia that emerged following the War of Succession (1714). Next, study of the period between 1790 (the first economic crisis of an industrial nature) and 1833 (the year that the first steam engine was installed) has shown how profound were the transformations experienced by the Catalan textile and yarn industries. It was a phase of industrialisation based on the adoption of different types of machines, such as the spinning jenny for yarn production, that were needed to allow factories to fully mechanise,

which took place from 1835 onwards. This decade and the following one may be considered to be the moment when the Industrial Revolution takes hold in Catalonia, accompanied by the formation of industrial capital¹¹. The history of design in this case is influenced by the consolidation of demand for design services, determined in turn by company policies.

Seen another way, the evolution of the notion of design is motivated by cultural processes and therefore depends on consumer habits, the dynamics of trade and the customs of a people, including their values, tastes and desires at a time when these are undergoing change. But in all instances, the processes involved were at times gradual, at times sudden or radical breaks; either way, they were long and difficult. The longer the period we consider, the easier it is to appreciate that, in actual fact, we are dealing with different faces of the same coin, different aspects of the same phenomenon, which are interrelated and converge in the history of design in its local manifestation.

As for the professionals themselves, apart from observing the vicissitudes of the use of the word design throughout history, it is also interesting to note the many other words or paraphrases that have been used to talk about the practical activities the term denotes and the type of products currently viewed as examples of design: in Spain, we must note the use of a wide variety of terms, ranging from industrial arts to applied arts, decorative arts and sumptuary arts, and finally, the art industry¹² and the fine crafts; and if we focus on the professionals who dedicate themselves to these fields, they have been called commercial artists, draftsmen, and graphic artists. Seen in their historical context, these terms throw much light on the continuity between the different phenomena discussed above, while they are undoubtedly related. In the case of design (whatever definition may be used), the various terms have ended up creating a series of dichotomies that have structured the historiographical approach to the phenomenon. For example, according to the terminology generally used

in Barcelona: between craft industry, decorative arts and industrial design, commercial art and graphic arts, and the latter and graphic design, and so on.

FIRST ORIGINS. THE EMERGENCE OF THE DESIGN FUNCTION

Taking account of the deeply rooted concept of design as a new profession, we can say that it is socially and economically born when we first find fees paid for design work—that is, when there is a payment in exchange for the delivery of a drawing or project to be used in the manufacture of a product later to be sold. In Barcelona, this seems to have occurred around 1740 with the complete functioning of the first large factories that produced calico prints; new entrepreneurs hired foreign experts as designers and engravers to undertake the “painting” or printing of cotton fabrics for the luxury market. Legal documents from the period show such people being contracted by factories¹³.

88

While it may be a bit precipitous to infer from this that in eighteenth-century Barcelona there was a conception of design comparable or similar to that of the present day, there is no doubt that the trade of designer was already beginning to emerge in the factory structure. Indeed, a report of the Board of Trade of Barcelona written in 1780 identified eighteen different categories of individuals “who tend to form the workforce of a calico factory”. Among these we find the trades of dibujador (draftsman), engraver, printer and pintador (painter or colourist)¹⁴. We must keep in mind that this industry took root in Catalonia through factories specialising in fabric painting; in the early stage of the industrial system, although many of these factories possessed looms, all of the cotton yarn as well as many of the fabrics to be printed were imported. This dynamic would remain until the end of the century when, responding to the tastes of the American colonies, in addition to printed calico, many companies also began to produce painted linen fabric¹⁵. According to the fashions of the time,

this sector of calico or printed cotton manufacture was often known as “printed in the Chinese style”, denoting the Eastern origins of both the product and the spirit with which the imported technique was adapted to procedures that were already known in the West—playing cards had been printed using a similar woodcut technique for a long time. To put it in terms of taste and fashion, it should be remembered that the end of the century was the golden age of chinoiserie in Europe and its colonies.

For an industry such as this, design was key from the outset: it was vital to have constantly new patterns, new ornaments for printing—that is what the business was about. However, simply that new companies hired artists-designers—*dezenyadores*—to obtain these patterns is not the only indication of the historical transformations underway. Many words were also changing meaning in the language of time—for example, art, industry or factory. For example, the word *fabricante*, which in Spain since the nineteenth century has meant the owner of a factory, “manufacturer”, in eighteenth-century Catalan was used to designate an expert in the colours and inks of the calico industry, one of the most important parts of the process since it was the *fabricante* who lent style and prestige to the company through the quality and variety of the colours he created¹⁶.

It may be argued that during a period as early as the first half of the eighteenth century the words *diseño* (design) and *dibujo* (drawing) were still synonymous, and therefore the occasional use of the word *design* does not indicate anything special. But in my view, the way that these words are used in many texts of the time indicates that, at least conceptually, they were quite clearly beginning to be used to distinguish between different activities¹⁷. On the one hand, many of these texts distinguish between “liberal” or “noble” arts (which were being organised into academies) and “mechanical” or “menial” arts (which were still governed by the guilds that made up the bulk of the industrial arts at the time). The latter were gradually specialising, bit by bit, and the industrial

arts were diversifying according to type of industry, categorised, in colloquial terms, as "traditional" or "new". In the absence of a specific word to refer to the roles found in the new industries, the word *diseño* is often used to describe the activity of defining and differentiating the items produced by the mechanical arts—this becomes more important as we investigate the economic impact of the consumption of luxury goods, and in Spain, as throughout Europe, there were arguments about the advisability of sumptuary laws¹⁸.

It seems that in Baroque and Enlightenment Spain "design" was talked about due to the theoretical influence of Italian Mannerist art and its definition of the art of *disegno* as being central to the system of Fine Arts¹⁹. The Italian language does not have two words to distinguish between *diseño* (design) and *dibujo* (drawing) and thus Italian texts were translated into Spanish using either word indiscriminately. But if the Mannerist idea of *disegno*, as pointed out by B. Bassegoda, involved a reworking of the rhetorical concept of *inventio*²⁰, then it already carried within it the component of planning, creating and organising a programme that characterises the thought of design when working for industry. On the other hand, it is natural that in that early period there were no major differences between the different forms of drawing; between, on one hand, artistic drawing referring to the conceptualisation phase in the "arts of *disegno*" (that is, the process of sketching a picture or sculpture prior to its execution), and, on the other, the delineation characteristic of technical and technological activities, those two-dimensional drawings, flat and geometrised, that were used in the stamping or styling of fabric and all the other materials that could be decorated to make useful things. But if it is true that all these creative activities required drawing, and if the result of the work was always and inevitably a drawing, the requirements that each drawing had to meet were already well delimited socially and economically, even if the drawing style used by all of them looks similar and is governed by the same rules²¹. That in Barcelona and Spain the problem was already clearly stated by the mid-eighteenth

century can be seen from the debates and writings inspired by the educational policy of governments and Enlightenment authors²².

As is well known, an important feature of the modern concept of design is that its practice is linked to industrial production, establishing it as an integral part of the whole production process. Pevsner was already using this definition as a criterion to trace the history of design in 1936. Subsequently, in 1948 Sigfried Giedion, while analysing in detail the phenomenon of mechanisation, found that design first emerged as a specific part in the industrial process— this, in turn, informed the value given to design that was anonymous²³. According to Giedion's treatment of design, it appeared quite naturally during the transformation experienced by the trades as they adopted the assembly line— this happened (and the same is true in Barcelona) outside of the guilds, and often openly opposed to them. In the city, the very existence of the Board of Trade as an entity that defended the interests of the new industrialists and merchants is a good indication of the process underway. The appearance of design is thus a consequence of the technical division of labour that took place during the first phase of industrialisation, the stage of proto-industrialisation. In the Board of Trade document mentioned above, we can see that by 1750 there were already eighteen different functions or roles just in the calico printing process. To these we should add the functions of management, financing and administration of factories, some of which were already companies as we might recognise them today. Having differentiated between intellectual and manual roles, among the thinkers appeared a figure whose specific task was to draw what he had to produce. Design was then used to designate a stage of the production chain that consisted of deciding what was going to be done; this stage involved ensuring that the product being developed perfectly suited the technical equipment available and the characteristics of the material to be processed. This is the principal historical origin of design that defines it as a specific activity and gives it a specific place in the production

process. And in similar terms today it remains a well-established part of any business.

Such an explanation may seem artificial and even a bit simplistic in relation to the long, complex historical process it aims to explain²⁴. Nonetheless, it is useful to take this explanation into account when analysing the role of design in the different economic sectors: it allows us to identify the moment when industrialisation began and discern when a particular economic sector needed people to take charge of the design process. It is also helpful when we observe the evolution of the old artisan workshops and note when they begin to undergo industrialisation, whether or not they were factories in the literal sense of the term. Seen from a historical perspective, the adaptation of production processes to the dynamics imposed by the division of labour was a slow process that took place over at least two centuries, and it occurred at different times in different sectors. Indeed, not all sectors or trades became industrialised at the same time. The transformation of the trades depended both on the market and on the raw materials used. In Catalonia, while the division of labour appeared in the textile sector during the first half of the eighteenth century, it was not until the second half of the nineteenth century that the publishing industry experienced the same process, at which point it clearly differentiated between the figures and activities of the publisher, the printer and the bookseller. For its part, the furniture industry would transform itself more slowly throughout the nineteenth century, as it imported the latest technological innovations for the handling of raw materials, such as veneering or bentwood techniques²⁵. In short, in order to discern the degree of industrialisation, technological innovations in production are as relevant as business organisation and the management of the marketing and sale of products.

These origins had various consequences for the conceptualisation of design. One of these relates to what to design: how to know what to do and what it offers to the market; the other refers to the criteria

of quality and consistency that would govern good design. Indeed, when the design is merely a stage within a larger process, it is seen as an art in the old sense of the term—that is, a technique (and the knowledge of this technique) whose parameters of quality and consistency are to be found in its own internal dynamics. There are not, therefore, sufficient elements worthy of reflection to allow a choice between ethical and ideological values, and often not between aesthetic criteria, either.

Now, in order for the design function to become the design factor, and for simple know-how to become genuine *savoir-faire*—and thereby develop its strategic potential—it had to incorporate into its dynamic of mere technique various external values: ethical, aesthetic or even ideological values that would correspond to selective criteria.

THE DISCOVERY OF THE DESIGN FACTOR: THE QUESTION OF LUXURY AND THE FORMATION OF A MARKET FOR DESIGN

The consolidation of design as a profession and its on-going cultivation involved many other important circumstances, from the existence of a market for designed, industrially produced goods, to the availability of technically trained professionals. This consolidation required the recognition of design as a strategic factor for business, and this, while abundantly clear in the field of luxury goods from the outset, would take time to transfer to mass consumer-oriented sectors, let alone mass consumption (a problem peculiar to the twentieth century). In the proto-industrial period, the market relied on the growing demand for luxury products, both among the aristocracy of the court and among bourgeois classes in the new centres of production. In the early and mid-eighteenth century there was an expansion of the Rococo style, with its profusion of decoration, but also a growing demand for sober bourgeois furniture. This furniture grew in importance as the pieces became functionally specialised—it was at that

time that the proliferation of types of furniture became more and more stabilised and fixed to suit functionally specialised spaces. In Barcelona of the time, with a nobility reinforced by the enlightened despotism of the Bourbons (for the most part ennobled only very recently), but far from the court, home décor and personal “toilette” gained in popularity as the century progressed and the Cases Grans (Great houses, or mansions) were filled with late Baroque furniture as well as with furniture of a local Rococo style that emerged from the French style²⁶.

Since the previous century, the luxury market had been one of the main sources of increased demand for all types of products, leading to an increase in production across the various trades. In Barcelona, it had even led to the installation of new mills, mills to produce calicoes, thanks in part to commercial capital that was attracted to a productive business that seemed safe, but also thanks to the efforts of governments who wanted to reduce the importation of various popular goods, replacing them instead with locally produced products. With investors recognising the business opportunities—or, rather, the existence of a customer base for industrially manufactured products—that facilitated the deployment and development of these first factories, the driving force in the discovery of the design factor was the continued increase in demand for luxury goods.

Indeed, as suggested by many historians, behind the technical division of labour lay the urgent need to increase production. Among the possible reasons for this increase is that which in the eighteenth century was called the “luxury” question, which was discussed by almost all of the great thinkers of the time, including Adam Smith. This is a very interesting discussion from the design perspective as philosophers, fascinated by matters of economy and even political economy, woke up to the qualitative differences between goods in terms of value, features and reliability in economic and investment terms. They also realised just how incredibly intricate were the public’s preferences towards these visible qualities,

and how much depended on the consumption of the fashions of the moment; however, at that time there was still a reliance on the standard of taste, and it was believed that aesthetic preferences were an indication of a person’s education, a sign of being cultured²⁷. If we take into account that this is precisely the time when the Fine Arts system is being formed, beginning the process that would lead to total autonomy, it is very plausible that the industrial arts, already separate from simpler mechanical arts, and in a position to stimulate the Industrial Revolution, at that time needed to define their own procedures involved in creation and to acquire experts on these procedures.

One of the areas where the process of industrialisation was most accelerated around the world was in textiles. However, it was the new products, those derived from techniques imported from Asia—porcelain, silk cloth and cotton prints or calicoes—that took form through industrial manufacturing, leading to the creation of factories. Cotton is a good example of this phenomenon, since the raw materials had to be imported and the processing had nothing to do with that of the traditional indigenous fabrics—wool and hemp, cloths and canvas—which were considered popular in Spain. In addition, like all of the new industries, this one burst directly into the luxury market.

The process of the formation of the calico industry in a place as specific as Barcelona and its surrounding area is a good example of how the design factor was assimilated into the production process at this early stage, and to what extent, but also of how it was conditioned by the market²⁸. Given the nature of this industry in Barcelona, the need for well-trained designers and manufacturers soon became apparent because, on the one hand, the cotton industry at the beginning focused only on printing, while on the other, because managers immediately realised that competing on the domestic market with products from abroad depended upon the uniqueness, quality and attractiveness of the products in addition to the quality of the printing and the liveliness and durability of the colours. Since the need for good

designers soon became apparent, it was no surprise to see that the political and economic authorities put their efforts into promoting design, and training professionals to improve their technical skills, but also into educating them and encouraging their creativity and development of taste. The concept of design was charged with a meaning related to inventiveness and the ability to offer good new ideas, new motifs, new ways of drawing, and new creative possibilities. This further reinforced the sense of the term *disegno* that links it directly to the rhetorical idea of *inventio*.

THE GROWTH OF DESIGN SERVICES: BETWEEN INDUSTRY AND ART

That there was a well-defined design function within the dynamics of production does not necessarily mean that those who were responsible for this were designers. By identifying design as a specialised function within the production process, the concept becomes a verb that designates a particular type of action and, as such, turns into a particular way of thinking that addresses the methodology of design. In English, as well as in Spanish, design is an active verb that signifies what designers do, although it can also be done by many other people without specific training that would lead to a particular accreditation. The professionalization of design would require the establishment of a systematised body of knowledge and expertise with a clear jurisdiction that could be taught. In the eighteenth century, drawing techniques formed the core of these skills; this is most clearly seen in the floral drawing tests organised regularly by the local design school.

Moreover, one of the many markers of the advent of modernity is the shift in the system of training professionals, which led to the emergence of schools and universities as places of specialised training²⁹. As regards Spain, one element to consider is the decisive policy of enlightened Bourbon ministers to foment drawing instruction in independent schools, away from artisans' workshops. One of the most

significant decisions in this context was taken in 1775 by Barcelona's Board of Trade³⁰ to found the Free School of Design based on the French model of the *École Nationale Gratuite de Dessin*, founded in Paris in 1766³¹. Earlier, the Economic Society of Friends of the Basque Country had founded six similar schools in two cities, but these were Public Schools of Drawing, created with the intention of improving the artistic training of artisans and workers, that evolved towards training for draftsmen in workshops and factory technical offices³². The Free School of Design in Barcelona, popularly known as the "*Escola de Llotja*", began as a vocational school to train artists and designers working in the proto-industrial textile sector. A comparison of the school's activities with the promotion and establishment of the fine arts further strengthens the thesis that foundation of this school is proof that the function of design was already perfectly defined, even in the socioeconomic context of the *Ancien Régime*³³. In this sense the spirit of the foundation of this school is also reflected in the fact that the Board of Trade and the School gave a grant in 1776 to a watchmaker so that he could continue his studies in Europe, taking good note of the mechanical innovations in other countries³⁴.

It has been much debated whether the name of the school can be considered a precedent of Barcelona design culture. Its subsequent evolution, true to the dictates of enlightened Neoclassicism, suggests not, considering the effort devoted to teaching Fine Art drawing. Art was another one of those words undergoing change—indeed, it probably experienced the most radical transformation of all. The Fine Arts system was being formed, and art was emerging as the autonomous and independent activity that it remains in the present day. In 1779, the school was renamed the *Escuela de Nobles Artes* (School of Noble Arts). However, many years were to pass before the formation of the Academy of Fine Arts in Barcelona around this nucleus, in 1849. Without any doubt, the reasons for this delay must be sought in the policies of the Board of Trade, who did not want to lose control of specialised and technical training in the

region. Now, during the period when the Llotja was known as the School of Noble Arts, it maintained the system of two different types of drawing, the second being the drawing of ornaments and decorations. Whatever were the teaching methods practised in the school, or the Neoclassical influence on drawing (and later other art trends and movements), the truth is that the school cultivated and implemented an idea of design—decorative drawing—that may be seen as a forerunner of what we have today. This arose from a demand for novel patterns ("invention", in the language of the exams), always focused on industrial production and serial reproduction to compete with imported products on the domestic market³⁵.

The orientation of these studies towards the artistic and aesthetic training of skilled craftsmen took in all of the luxury product industries: printed cottons and silks, but also glassware, porcelain, jewellery, carved wood and wrought iron. In this sense, a 1785 letter sent by the Board of Trade and the Free School of Design in Barcelona to the Count of Floridablanca (then minister of Carlos III) in relation to a conflict triggered by the guilds against the graduates of the Free School of Design—and by extension against the school itself—groups together all those trades that, according to the director, should benefit from legislation that would allow them not to rely on the guilds. This demand was justified by arguing that, as the letter claims, "they are related to the arts through the requirement of drawing". Besides painters and sculptors (who were not affected by this dispute), the letter defined such trades as including "goldsmiths, jewellers, stamped cotton plate engravers, embroiderers, those working with velvet, lace-makers, copper workers, gilders, gunsmiths, sail-makers, sword-smiths, joiners and dagger makers". It is a highly indicative list of what at that time were considered luxury items.

In another report written in 1778 for the same reason and signed by the then director of the school, the etcher Pere Pascual Molas, the author attempts a classification of the arts in which they are divided into "necessary, luxury and auxiliary". He defines "luxury"

as being anything invented for the pleasure and delight of man, "such as the Fine Arts" and "anything else that can properly be called luxury art". The debate is underpinned, of course, by the social and economic consideration of the various "mechanical" trades that may even be considered servile in relation to fine arts, such as architecture, which held a greater social status and which needed to free themselves from guild regulation³⁶.

However, the drawing of ornaments always took second place in the minds of those running the school, even if the number of students on that course was always much higher than those training to be artists. This shows that the expectations for design were still limited, hampering its expansion and consolidation. Indeed, in being concerned only with competing with imports into the domestic market, the hoped-for "invention" was in fact more imitative of the movements and styles coming from outside, and was dependent on fashions. Also in Barcelona, as in Spain more generally, consideration of exporting and competing abroad would still be a long time coming and, therefore, however much politicians and educators discussed the need to educate the public in matters of taste, the requirements for design patterns did not go beyond what the public was already consuming and sought out precisely because it was what was popular abroad. For a long time the Spanish market was captive to "novelties from Paris" or patterns from England. Even if at that early time somebody had discovered the importance of the design factor, thanks to luxury consumption, so that they might have developed this factor and understood that it is an aesthetic practice, it would also have required a firm commitment to export and compete in the international market—something that was realised only later in Spain and Catalonia³⁷.

Instead, this had been seen by some economists and politicians from the Spanish Enlightenment who were concerned with reducing imports in order to promote domestic industry. For them, it soon became clear that commercial success depended on the factors of

design and fashion. So, for example, if one looks at the arguments directed towards the trades in Valencia on the need to create studios— a demand made by the Greater College of Silk in that city and directed towards the Academy of Fine Arts of San Carlos, founded in 1768, it is clear that the conceptual core of what would become design was already well identified; and it was equally clear that the industry needed a manner of drawing other than that specifically suited to the production of art. So, for example, in a letter of 1779, B. Iriarte reasoned as follows: For the textile industry to progress there must be someone who is interested in this teaching, since as the architects and painters consider dedicating themselves to such work to be worthless, we have no one who can invent these useful and necessary extravagances. The French excel even if they do not have good teachers in the artistic domain; this does not prevent them from attracting to themselves all the gold of Europe—they would not have succeeded in achieving this had they painted like Raphaël or sculpted like Michelangelo³⁸.

94

The debates on luxury and its nature allowed an appreciation of just how important were the qualitative values that distinguish things from each other in the dynamics of consumption. These are the values that define the design factor and that allow the possibility of their strategic use by businesses. However, as the Ancien Régime came to an end and Barcelona saw the emergence of a new society resulting from the Industrial Revolution, it became obvious just how deep and widespread was the confusion over the quality criteria that governed the design factor. To understand their nature took time. Thus, when it became introduced within manufacturing and factories, if design had a clearly defined role in the production process, to discover the design factor was to redefine its role and assign a new task loaded with a heavy dose of social responsibility. There was, then, a second moment related to the foundation of design, something like a second origin. This time, design was born as an aesthetic practice undertaking a culturally relevant activity. Since then, design has been responsible for the improvement of

industrially produced goods, for ensuring the aesthetic quality of the artificial landscape as a whole, and for making material culture the visible manifestation of the degree of civilisation attained by modern society. It also falls to design to ensure the quality of life for citizens, regardless of their social background or level of education.

THE SECOND ORIGIN. DESIGN BECOMES AN AESTHETIC PRACTICE

In effect, this second origin is a historiographic hypothesis that has strongly influenced the current conceptualisation of design. Historically, this is dated to the second half of the nineteenth century and was a consequence of the debate on the regeneration of the industrial arts that took place in most industrialised countries in Europe. It refers to the process from which this trend emerged and spread a new conception of design that establishes it as an aesthetic practice. This notion was born and developed in Victorian England. In the English debate, as is well known, the idea of design not only emerged as a new profession but as a complex activity, embedded in the production process that undertook the difficult task of improving articles and machine-made products in order to promote more cultured and sophisticated tastes, thus educating consumers and improving the public's taste. Thus, the core of the issue had shifted completely from the design function to the design factor, but this factor had also acquired new nuances that established it as an aesthetic practice embedded in the material production of useful things. Thus, the notion of design acquired an axiological value, a selective capacity, according to which not everything that is designed can be considered to be true design.

In Victorian England, the professional figure of the designer emerged as an antidote to a situation that was considered critical once it was discovered that the majority of industrially manufactured products were ugly, vulgar, nasty and shoddy—in Spanish, *cursis*³⁹. In this sense, the new notion of design defined

its practice by identifying a social, and not just an economic, need. This was the result of critical thinking about society and industrial production, a current of thought that decried the impoverishment of social relations in the bourgeois world, the growing ugliness of urban and rural landscapes, and the vulgarity of the things that were produced and consumed, populating the landscape of the home. Seen from this perspective, the design factor goes far beyond the need to distinguish between goods or give them added value—an artistic finish—to instead become an aesthetic practice whose value necessarily depends on its cultural relevance, and, in this case, it articulates an aesthetic utopia that should be constantly measured against the dynamics of consumption and user preferences. From this growing awareness, a period of reflection and a discourse prompted an effort to discover the principles of good design: what mattered now was to understand what the “design factor” consisted of, what criteria governed it, and what its quality standards might be.

Many other countries were discussing the industrial arts and thinking about how to drive them forwards. Throughout the nineteenth century in France and Spain, the effects of industry were seen with the same intensity as in England, although the question was formulated in different terms, and the debate on the regeneration of these arts led, especially in France, but also in Barcelona, to the conceptualisation of the decorative arts. In both places, the heart of the question shifted increasingly towards art, and so the industrial arts of the eighteenth century that were already considered arts of *disegno*, as they became decorative arts, entered the sphere of influence of art, in turn becoming “art for art’s sake” and the realisation of beauty so characteristic of *fin de siècle* symbolism.

On the other hand, if one takes into account the emergence of the decorative arts characteristic of Art Nouveau in France or Modernisme in Catalonia, the meaning and effectiveness of the debates over the application of art to industry are placed beyond any

doubt. A very different question is whether there had also been formed a design culture within the hearts of these movements, whether they had created an environment receptive to the contributions of design to the production network, or—to put it another way—whether there was now a demand for design among consumers and industrialists, to check whether an idea of design similar to the one found in England had implanted itself (even if under a different name)⁴⁰ and, finally, whether they had yet witnessed the emergence of professionals comparable to current professional designers, dedicated to working with mechanised production. Ultimately, the question concerns, on one hand, how and when local demand for design from industry and consumers emerged in order to know what, specifically, was expected of designers; and, on the other, whether there was yet a supply of design services that could not only respond to this demand but also demonstrate through its practice the many inconveniences that design could resolve.

As regards the situation in Barcelona, the question is an important one for several reasons. First, due to Catalonia’s economic position in Spanish state in the last third of the nineteenth century, given the region’s level of industrial development and its position as the “factory of Spain”. In the 1880s, on the threshold of Modernism, Catalan factories were highly mechanised and equipped with modern and frequently updated machinery. Between 1814, at the end of the War of Independence against Napoleon, and 1914, virtually all of the different economic sectors, including those of wood and furniture production, had undergone their own industrial revolutions and were sufficiently mechanised to match many other developed countries. Second, because the Catalan industrial production network that had begun with textiles in the eighteenth century had become diversified during the nineteenth century and had become specialised in the manufacture of consumer goods. Third, because the city of Barcelona was growing in population and area, adding, from 1860 onwards, the *Eixample* (extension) on the plain that surrounded the

old city walls. This generated a substantial increase in demand for products and the trades related to construction and architecture.

And finally, the question is important due to the existence of a wealthy class willing to consume new products and fashion, and to adopt the bourgeois way of life without getting troubles. The conditions, therefore, were entirely suitable for the development of a design culture in both of the senses analysed so far, namely having a specific function within the production process and as a quality factor in the goods produced, but also as an alternative cultural movement emerging from the systematic criticism of the reality and productive system of that moment. For the historian, the question now changes radically: did Catalonia develop a culture of objects that may be considered a forerunner of modern design—one focused on the production of consumer goods—when the region had a highly industrialised economy, a wealthy bourgeoisie with the means to be consumers, and a powerful and well-organised labour movement?

96

To answer this question requires a broader view and an in-depth analysis of Catalan Modernism as a complex cultural movement and of the debate on the regeneration of the art industries, held in Romantic, positivist Barcelona after London's 1851 Great Exhibition had highlighted the many gaps in local production.

In its original formulation in the 1880s, Catalan Modernism showed a willingness to break with the past and the status quo in some respects comparable to the English phenomenon, albeit with a character only really understandable locally. Speaking broadly, it pursued the growth and "normal" development of a modern local culture that would express itself in Catalan, that would not be limited to importing artistic movements and fashions from overseas, and that would be able to update indigenous production, thus having its own identity and even contributing to international debate. It also wanted to fight imports while joining and contributing to the mainstream of European cul-

ture. This is so as much for the goals set as for the results achieved—the creations of architects such as Gaudí, Domènech i Montaner, Puig i Cadafalch, Rubió i Ors, among others, aided by an extensive network of workshops and production companies—Modernisme is an important legacy contributing to Barcelona's design culture. Without going so far as to define the differences between art and design in most works, it did succeed in creating demand for design in industry and promoting its use among the public⁴¹.

As for the debate on the regeneration of the industrial arts, the references necessarily go back somewhat further. During the absolutist Restoration (1814), both in Barcelona and in the rest of the country it was still thought important to promote industrial arts for the usual reasons: to curtail or even block the importation of goods, especially luxury goods, which were still moving the market. In 1827, for example, during a visit by King Fernando VII to Barcelona, an exhibition was organised for him at the School of Noble Arts showing "artefacts and devices produced by the industrial arts in the province", and "hoping that would please [the king] so that others would continue to dedicate themselves to seeking in the mechanical arts elegance, comfort and polish"⁴².

This marked the beginning of a period in which industrial arts exhibitions were organised with some frequency to illustrate the progress of industry. On the eve of the first Industrial Revolution, the situation was very similar to that of the previous century. Coinciding with the arrival of mechanisation, the artistic industries were gradually entering a state of prostration that was thrown into sharp relief in the Spanish section of the 1851 London exhibition. Judging by the comments of the contemporary press, at that time the decadence of the whole of Spanish production seemed beyond doubt. But if we look more closely at the comments, the Spanish and Catalan reaction was very different from that provoked by the same exhibition in England. English commentators had focused on the ugliness of most of the products presented by the advanced

industrial powers. This reaction was a catalyst for reform, but it also questioned the very idea of progress based on simple technical development while it made a judgement about the entire period. In Barcelona, however, what most hurt was the criticism of the technical quality of the exhibits, and the products' lack of character⁴³. With such thoughts in mind, it was not unusual that, from the outset, the regeneration was undertaken according to the French model—that is, by applying art to industry⁴⁴. It also becomes clear that the protagonists of the debate in Barcelona never doubted the virtues of progress, nor thought of the social, political or aesthetic consequences of progress. Neither did they argue about whether further development of industry was appropriate—quite the contrary. The main criticisms point to the crisis in art and the lack of aesthetic reference models as being at the root of the situation. For some, industry even seemed more advanced and more able to provide aesthetically interesting proposals than the fine arts.

Other reasons for the crisis were inherent in the same conception of the predominant art. During the first half of the century, the benchmarks for quality and good taste remained the royal factories, which supplied the court. Interestingly, the debate arrived on the scene just when the royal factories were closing, due to their lack of profitability, in the 1840s. But for Spanish consumers, quality was still linked to craftsmanship, hand-made attributes, and above all objects were valued for uniqueness and exclusivity⁴⁵. In this regard, by the mid-century it was still believed that luxury items dictated fashion and influenced public taste; the same idea is found behind many modernist projects, especially the most elitist. It is not surprising that allusions to luxury appear regularly throughout the debate, nor that, for this reason, greater artistic quality would seem the most appropriate response when producing industrially competitive products for the luxury home market to reflect contemporary needs and styles. As noted by Pitarch and Dalmases (1982), from the point of view of the dominant artistic culture it was very hard to realise that it was the metal working sector, an almost entirely new sector in the

nineteenth century, that was introducing more and more innovations in the design of objects, products, techniques and formal systems, and that best offered clues on how to get out of the style crisis that was evident in more traditional sectors—glass, ceramics, wood and tapestries—that produced so many items for the showcases in the key spaces of social emulation, namely, the lounge and the dining room. Yet there were some contributions that looked directly to the industrial arts in search of aesthetic criteria and saw in their development the solution to the crisis that was affecting art. The boldest observers saw in industry and its progress the true spirit of the century, an activity that was constantly renewing itself, and so concluded that it might hold the solution. It was even said that the industrial arts could be considered the art form of the time. But that would require an understanding of its nature and the conditions imposed on the production of useful things. Whether due to the debate, or due to the dynamics of the *Escuela de Nobles Artes*, the truth is that by the end of the nineteenth century the figure of the draftsman was well defined. Some of them produced models for industry, some even ran factories or businesses⁴⁶.

There can be no doubt that the debate on the regeneration of the industrial arts that preoccupied Barcelona's intellectuals for many years was a major step forward on the path towards the professionalisation of the design function; it also greatly influenced the discovery of the design factor, and allowed an understanding of its economic importance. But the main concern remained the ability to compete with foreign products in the domestic market. The activity of the designer, the industrial draftsman, was emerging as a common aesthetic practice in industry and the industrial arts. As the century progressed, the design factor became increasingly important, even defining a group of companies that identified themselves as a part of artistic industries, but this factor was losing identity by being approached as an art and was largely subsumed, first as an applied art, and immediately after as a decorative art. Apart from the eclecticism

that inevitably resulted from this conception, methodologically speaking, the idea of "applied arts" implies, in respect to the concepts of industrial arts or artistic industries, a setback on the path towards the consolidation of design as a specific, aesthetic practice, if we consider that this very notion impedes what it was striving for, namely the union of art and industry, beauty and utility, establishing instead a clear separation between the two poles: art may deal with visual aspects, but only manages to style tools whose utility turns out to be questionable⁴⁷; industry limits itself to innovation and the resolution of whatever is unseen in the objects, hiding behind style.

In this process, Modernisme marked a turning point. It reformulated the concept of decorative arts, definitively recognising them as luxury arts, thus entailing a return to the discourse on luxury and niche markets for industrial goods. At first, the option of *l'art dans tout* adopted by Modernisme and the subsequent progress of the decorative arts seemed a tangible demonstration that the modernisation of the country was heading in the right direction and that the aesthetic preferences of the public had improved. But soon afterwards, the excessive proliferation of an obviously imported Art Nouveau style turned the movement into a decorative fashion. It should not be forgotten that at the turn of the century the city saw the arrival of mass society, of consumer habits, of the artistic *avant-garde*, in sum, a modernity characteristic of the twentieth century. That there had been a profound socio-cultural transformation was evident in the years of the First World War. The conversion of Modernisme into a fashion from 1900 onwards had contributed to this transformation as an indication of the profound change that was taking place. It was not long before critical voices were heard, and soon the modernist intellectuals ceased to recognise themselves as such. For them, the new decorative arts signalled the failure of the reformist movement; they had become luxury arts. In addition, "luxury" had been completely reformulated. With the turn of the century, it was no longer something linked to the attributes of the objects according to

the logic of social emulation (as it had been in the eighteenth century), instead becoming, first, in one segment of the market, the reference model for industrial arts in the process of regeneration, and then, with the advent of mass consumerism and mass society, an aesthetic quality that manifested and appreciated high culture. In that sense, beginning with the contemporary criticism of decorative Art Nouveau, the basis was formed for assessing the decorative arts and design as an aesthetic practice. It was no longer enough to decorate, and it was not a simple matter of style; quality design required more, it had to be a true aesthetic proposal that was more than just "good taste". Given the scale of the problem, the response of Barcelona, as had happened in many other places in Europe, was to go back to the basics and look at the simplicity of vernacular production—although the vernacular was not much older than the discreet modernisation of so many items made in the eighteenth century—interpreting them as vestiges of an ancient tradition, educated and civilised, even urban—the eternal return of the Latin Mediterranean. Thus, in the context of mass consumption and mass production, luxury models were intellectualised at the same time that class differences were consolidated. It was the great lesson that Catalan Noucentisme imported from the Arts & Crafts model in a second interpretation of the movement, opting for an artisanal art, the art product. As Thorstein Veblen pointed out, referring to Ruskin, Morris and by extension to the Arts & Crafts, under the guise of vernacular simplicity hides an intellectually and aesthetically challenging idea because to be able to appreciate it requires a high degree of learning and culture⁴⁸. And being cultured, as is well known, takes time, effort and money, as well as an investment in education.

Research should now focus on discovering the reasons that the discourse on the arts and industries, rather than using design as a response to the ideal of aesthetic renewal operating from within industry, instead chose to look elsewhere and recover ancient craft traditions, promote manual work and craft, and promote an alternative productive network that

ran parallel to industrial development. This remains an open question, but we can at least suggest some guidelines for further analysis. In fact, the development of artistic craftsmanship that was not so much the renewed expression of the decorative arts as the recovery of a true art was the prevailing line of thought between 1910 and 1919, taking us from Modernisme to the Modern Movement, via Noucentisme, a movement particularly interesting for its indigenous and local qualities. It offered a cultured alternative to the exhaustion of Modernism. But at the height of Noucentisme, when it genuinely became an alternative to exhausted Modernism, things had changed, and both arts and culture had to deal with mass culture and what it meant—something that was made patently clear at the end of the First World War.

NOTES

¹ Definition proposed by John Heskett (2002), *Toothpicks and Logos – Design in Every Day Life*. Spanish translation: Barcelona, Editorial Gustavo Gili, 2002, 5. I developed the question in “Cuestiones de fondo: la hipótesis de los tres orígenes del diseño”, published in *Diseño e historia*. *Tiempo, lugar, discurso*, México, Fundación Historia del Diseño y Designio, 2010, 63–85. While there I analysed the hypothesis in general, sometimes using the cases of Barcelona and Spain as an example, the goal here is to check the theory's validity by applying it to the Catalan reality.

² Since the War of Spanish Succession in 1714, various decrees banned the use of Catalan. The most significant were those who banned its use in education (1768), in business and account books (1772) and in the publication of textbooks (1773). These laws were promulgated by the Bourbons, who reigned in the eighteenth century, Felipe V, Carlos III and Carlos IV—the last of which also banned theatrical performances in Catalan or in any foreign language.

³ Oriol Pibernat presented an initial summary of his research on the uses of the words “design” and “drawing” in Spanish and Catalan at a seminar held in Norwich in July 2008 organised by the Sainsbury Institute, University of East Anglia. Published in Haruhiko Fujita (ed.) *Words for Design*, II, JSPS, Osaka, undated.

⁴ It was the enlightened minister Pedro Rodríguez Campomanes who most staunchly defended in his texts on economics the virtues of domestic industry in a debate established in terms of urban industry (or that concentrated in cities) versus industry scattered throughout a territory. The arguments in favour of this second model were social in nature, reflecting the fear of concentrations of workers or peasants migrated to the cities, even if they were not yet workers and the unrest that could follow. His key texts are the *Discurso sobre el fomento de la industria popular* (Discourse on the promotion of popular industry). Madrid: Antonio de Sancha, 1774, and its continuation in *Discurso sobre la educación popular de los artesanos y su fomento* (Discourse on the popular education of artisans and its promotion), published in Madrid the following year. For a discussion of these texts from the point of view of their political significance, see Ramon Grau: *Antoni de Campmany i la renovació de l'historicisme polític català*. Barcelona: ICUB Arxiu històric de la ciutat, 2006.

⁵ For an analysis of royal factories and their historical evolution, see Antoni José Pittarch and Núria Dalmases, *Arte e industria en España 1774–1907*, Barcelona, Blume, 1982. The same authors developed the issue in two articles published in the catalogue of the exhibition *Diseño en España*, Brussels: Europalia 1985. The most important royal factories were the Real Fábrica de Tapices (Royal Tapestry Factory), Madrid (founded 1720); the Real Fábrica de San Ildefonso de la Granja, dedicated to the production of glass and crystal (1727); the royal press run by the Neoclassical printer Joaquín Ibarra (1725–1785); the royal factories of china and

earthenware at El Retiro (1760); and the Real Fábrica de la Moncloa (1817), in Madrid.

⁶ The first text analysing the semantic field of the term "design" in Spanish was Yves Zimmermann's article "¿Qué es el diseño?" published in *Del diseño*, Barcelona, Gustavo Gili, 1998: 101–121. Meanwhile, Pilar Vélez has found synonymy between the terms *dibuix* (drawing) and *disseny* (design) in Catalan Enlightenment culture in her studies on the evolution of the *Escuela Gratuita de Diseño* (Free School of Design) from 1775 onwards in several articles, including the one dedicated to the discussion of art and industry. From my own point of view, I have always thought that the choice of the word *diseño* to describe the activities of a drawing school was not arbitrary and that, while we cannot consider it a direct forerunner of today's culture of industrial design, it does constitute a useful ancestor when considered in the productive context of the time.

⁷ This is the case with many housewives who design quite naturally without obtaining any sort of payment in return, or many other professionals who design without thinking of the career possibilities of what they do and know: this definition is especially relevant in the area of gender and questions the claim made by historians such as Cheryl Buckley when she introduces the question of gender (an argument defended in a paper presented at the Design + Research congress in Milan, May 2000). With respect to the difficult and complex relationship between artisanal or craft products and design, the relationship between the two practices, this definition is made taking into account the historiography derived from Jervis 1984, who included in his dictionary of designers various figures from before the Industrial Revolution; this, too, calls into question any understanding of the phenomenon of the decorative arts as being a solution to the problems of the industrial arts.

⁸ The first clashes took place in Barcelona following the creation of the *Escuela Gratuita de Diseño* (Free School of Design) due to the influx of artists and craftsmen trained in the school in various sectors coming into competition with the sculptors and painters. Already in the last quarter of the eighteenth century there are documents showing legal proceedings initiated by the guilds before the king against the school and its graduates. For the fighting between artists, see Manuel Ruiz Ortega: *La escuela gratuita de diseño de Barcelona, 1775–1808*. Barcelona, Biblioteca de Catalunya, 1999, which published the documents as annexes. Regarding the breakup and decay of the guild of carpenters, and its lawsuits taken against sculptors, weavers and chair-makers in Barcelona in the eighteenth century, see Rosa Creixell: "L'ofici de fuster a la Barcelona del setcents. Noves aportacions documentals, noves mirades" in *Locus Amoenus*, 9, Barcelona: UAB, 2007–2008, pp. 229–247. For an overview of the issue, see Manuel Arranz Herrero: *La menestralia de Barcelona al segle XVIII. Els gremis de la construcció*. Barcelona: Proa i Arxiu Històric de la Ciutat, 2001.

⁹ The abolition of the guilds required several decrees. The story

parallels the development of political liberalism. In 1813, the absolutist Fernando VII, issued from exile first Freedom of Industry decree that effectively abolished the guilds and their power. However, it was not until the Regency of M. Cristina that freedom of trade and industry were ratified with decrees in 1833, 1834 and 1836, the latter coinciding with the law of confiscation of feudal properties.

¹⁰ The reference and research articles are numerous, from the first input from Jaume Vicens Vives to the studies of his followers today, the legacy of Pierre Vilar or the investigations of James Thomson. The principal study on business capital formation and its conversion into industrial capital in eighteenth-century Catalonia remains the monumental work of Pierre Vilar (1962), *Cataluña dins l'Espanya moderna*, Barcelona, 62, 1968. For a rough indication of the acceptance of calico factories as a period of proto-industrialisation, see Ramon Grau and Marina López: *Empresari i capitalista a la manufactura catalana del segle XVIII. Introducció a l'estudi de les fàbriques d'indianes*, Recerques, 4 (1974), pp. 19–57; the 4th volume of Pierre Vilar: *Catalunya dins l'Espanya moderna*. Barcelona, Edicions 62, 1968, and James Thomson, *Els orígens de la industrialització a Catalunya. El cotó a Barcelona 1728–1832*. Barcelona: 62, 1994. Since then there has been a proliferation of studies on particular industries and the manufacturers of calicoes. All of these have published subsequent updates to their work along the same lines, Vilar analysing the Catalan industrial boom at that time, Thomson comparing it to what happened in the European context and Grau contextualising factories in the city's growth. See in this respect Sánchez Suárez, Alejandro (1992) *La indianería catalana: ¿mito o realidad?*, *Revista de Historia Industrial* 1, pp. 213–232. For an interpretation of the failure of the Industrial Revolution mentioned, Jordi Nadal: *El fracaso de la revolución industrial en España, 1813–1914*. Barcelona: Ariel, 1975.

¹¹ The first to study the period from the perspective of economic history was Jaume Vicens Vives. See his *Industrials i polítics del segle XIX*. Barcelona: Vicens Vives, 1958, written in collaboration with Montserrat Llorens. For more recent contributions, see Alex Sánchez: *Crisis económica y respuesta empresarial. Los inicios del sistema fabril en la industria algodonera catalana, 1797–1839*, *Revista de Historia Económica*, Year XV, No. 3, Autumn–Winter, 2000. For an overview, Jordi Nadal Oller (ed.): *Història econòmica de la Catalunya contemporània. Vol 3: S. XIX. Indústria, transports i finances*, Barcelona, Enciclopèdia Catalana, 1991. See also the *Atlas de la industrialización en España* led by Jordi Nadal; and V. Hurtado, J. Mestre and T. Miserachs: *Atlas d'Historia de Catalunya*. Barcelona, Edicions 62, 2002. The respective dating are as follows: James Thomson [Op Cit. 1994] dates it between 1740 and 1814. The period between 1814 and 1867 may be considered to be the first Industrial Revolution. The full mechanisation, or Industrial Revolution itself, begins in 1833 with the installation of a steam engine in the Bonaplata, Rull, Vilaregut y Cia factory.

¹² See the article by Teresa–M Sala and Julio Vives in connection with the adoption of the adjective "artistic" for the companies of

carpenters engaged in the manufacture of furniture.

¹³ The legal documents referred to are cited in James Thomson (1994), *Op. Cit.*, p. 101. Thomson studied the Canals factory, the first to be founded. On the other hand, according to Thomson 1989, in these early years, the recruitment of foreigners reveals the trade patterns in which Barcelona was participating: The presence of a Swiss worker, Pedro Genus, in the manufacture of Esteve Canals, founder of the industry, (...). The second is demonstrated, by the employment of a Hamburger by Bernat Gloria, founder of the second significant manufacture and later, in the mid-1740s, by that of the Swede, Jacob Lund, by Jaume Campins, founder of the royal manufacture of Mataró, a seaside town near Barcelona. [p. 75].

¹⁴ Report of the Board of Trade] quoted by James Thomson, *Op. Cit.*, 1994, and Manuel Ruiz Ortega: *La escuela gratuita de diseño de Barcelona 1775-1808*. Barcelona, Biblioteca de Catalunya, 1999: 92.

¹⁵ Sánchez reinforces the importance of printing as the first and main process of eighteenth-century Catalan industries. see Alejandro Sánchez (1992), *Op. Cit.*, n. 35, p. 222. Regarding the volume of industry, most historians accept the figures provided by Thomson in 1994, and Sánchez (1992), *Op. Cit.*, p. 219, n. 29. There were 80 calico printing factories in 1784, and in 1786 a document from the Bishopric of the city put at 100 the number of factories and private houses in which canvases were painted. The first of these were founded in the mid-1730s, and by 1750 there were already 8: "If one were to attempt to categorise the introduction of the industry to Barcelona with greater precision (...) Essential to it was a 1728 ban on the import of calicoes and government encouragement given to import substitution but the industry was not introduced by royal manufactures or by counts, the experience of eastern Europe, but, as in Neuchatel, Bale or Berne, by merchants, predominantly, some of whom would have had commercial links with the centres of the trade." James K. J. Thomson (1989): "The Catalan Calico-Printing Industry Compared Internationally". *Societat Catalana d'Economia*, Yearbook 7 (1989), p. 75.

¹⁶ For the evolution experienced by the words *industria* (industry) and *fábrica* (factory) in Spanish, see J. A. Maravall, 1973, specifically dedicated to these words compiled in *Estudios de la historia del pensamiento español*. Madrid: Mondadori, 1991: 139ff. Regarding the change of meaning of the word "fabricant" in Catalan, see James Thomson, *Op. Cit.*, 1994, p. 213. The histories of the English words "art" and "vulgar" were studied by Raymond Williams in 1958 following the process of empowerment of the fine arts: Raymond Williams. The aforementioned documents are cited in James Thomson, *Op. Cit.*, 1994, p. 101. Regarding the organisation of new businesses, see Pierre Vilar (1962): *Catalunya dins l'Espanya Moderna* Barcelona: Edicions 62, 1987 / 3rd, 4th vol: *La formació del capital comercial*. Thomson and subsequent historians suggest that the passage of the "fabricante," employed as an expert on colours making, to becoming a business owner is one of the greatest moments of social mobility in Barcelona. See Grau & López (1974) *Op. Cit.*, p. 37; Thomson (1989) *Op. Cit.*, p. 88 also analyses the social background of the founders of calico-manufacturing plants in the

case of Barcelona and indicates that the former manufacturers began to form new plants from 1760 onwards, which did not happen in the case of the printers.

¹⁷ The documents principally used to record these uses have been compiled by Manuel Ruiz Ortega (1999), *Op. Cit.*, annexes.

¹⁸ In austere Spain sumptuary laws have been enacted since the reign of Felipe II. In the eighteenth century, the debate was turned around and there are several authors who defended the need for luxury as a driving force for consumption and the economy, from the chronicler Baró de Maldà (1761-1764) to the scholars F. Romà Rossell (1768) or Antoni de Campmany (1775), among Barcelona writers. Moreover, as noted by Thomson in his various articles on the subject, it was a protectionist law of 1728 prohibiting the import of cotton printed fabrics that caused Catalan merchants to decide to open printing factories in Barcelona, giving rise to a new industry. See Thomson (1989), *Art. Cit.*, pp. 72-75. For a historical overview of the issue of luxury in Spain written in the eighteenth century, see J. Sempere Guarinos: *Historia del lujo y de las leyes suntuarias en España*. Madrid: Imprenta real, 1788.

¹⁹ Here I use the data and arguments of Oriol Pibernat presented in his Norwich seminar, *Op. Cit.*, n/d.

²⁰ B. Bassegoda i Hugas: "Notes a l'entorn del moble a Catalunya als segles XVI i XVII" in *El Moble català*. Barcelona, Electa 1994, p. 46. As for the meaning, the term *disegno* acquires during the Mannerist period, and as it was then inherited by most European academies in their approaches to teaching drawing (including in Spain), it is worth noting the thoughts of the Italian writer F. Milizia in *El arte del diseño*, written in 1725 and translated into Spanish in 1823. The spread of the term and its meaning reached its peak during the Neoclassical period, and corresponds to the Neoclassical conversion to a method for teaching drawing. A good account of the concept can be found in the book *Idea* by Erwin Panofsky (1924), Madrid, Cátedra, 1977.

²¹ Of particular interest in this regard are the drawings of sculptors and carpenters that Creixell published in her analysis of the suits brought by carpenters against sculptors when they argued over which guild should oversee the construction of altarpieces or furniture. See Creixell (2007-08), *Op. Cit.*

²² See in this respect the first part of Pilar Vélez's article in this book, which traces the various considerations made about the different types of drawings and specific business needs.

²³ Pevsner 1936, *Op. Cit.* From Sigfried Giedion (1948), *Mechanization Takes Command*. Spanish translation, Barcelona, GG, 1978.

²⁴ On the concept of the "artifice of historiography", see Renato de Fusco, «Artifici» per la storia dell'architettura. Napoli, Edizione Scientifiche Italiane, 1998.

²⁵ See the article by Teresa M. Sala and Julio Vives on the business development of the sectors of joinery and artistic carpentry in the late nineteenth and early twentieth centuries, in this book.

²⁶ See Rosa Creixell's research on eighteenth-century Catalan furniture: "Art Cit.", 2007–8: 229–247; Cases grans. Interiors nobles a Barcelona (1739–1761), Doctoral dissertation, University of Barcelona, Department of the History of Art, 2005; and Rosa Creixell and Joan- Ramon Triadó, "El moble català del segle XVIII. Primera aproximació" in *El moble català* [exhibition catalogue], Barcelona, Generalitat de Catalunya & Electa, 1994: 62–70 i 71–79 respectively.

²⁷ I have dealt with the eighteenth-century debate on luxury in "Inside Diogenes Boot: Luxury, Comfort and Well-being from The Point of View of Domestic Life in the 1700's," *Temas de Diseño*, Elisava TdD n o 3, Barcelona: Publicaciones de Elisava, 1989 http://td.d.elisava.net/coleccion/la-cultura-arquitectonica-el-discurs-del-disseny-el-disseny-i-la-seva-historia/dins-la-bota-de-diogenes-luxe-comfort-i-benestar-en-la-visio-setcentista-de-la-vida-domestica-1-en/view?set_language=en

²⁸ In fact, Jordi Nadal made clear the significant presence of painting on linen canvas for Catalan companies in the last third of the eighteenth century. In response, Alex Sánchez has proven that it was a temporary situation resulting from the opening of the American market to all Spanish ports to accommodate the demand from the colonies, which preferred cotton thread. See: Alex Sánchez (1992), *Art. Cit.*: 224–5. According to Sánchez, the height of the stamping of linen in Barcelona was between 1782 and 1784.

²⁹ In relation to the changes in the education and training of new professionals, as well as the existing correlation between training and the replacement of trades by professions, see Max Weber, *La ética protestante y el espíritu del capitalismo* (1904–5). Here I have used the 1983 Catalan edition. On the other hand, in Barcelona, considering that Felipe V had closed the university in 1714, the Junta de Comercio devoted itself to organising specialised studies of all of the disciplines that industry needed: the sailing and navigation school in 1771, the design-drawing school in 1775, the chair of chemistry applied to agriculture and the arts in 1805, the chairs of shorthand and statics also in 1805, and the chairs of political economy and physics in 1814.

³⁰ The Junta de Comercio (Board of Trade) was born in Barcelona in 1758 when Fernando VI authorized it by Royal Decree, allowing Barcelona to establish a Board of Trade, or magistrate, made up of traders from the Llotja, an Executive Board, a Consulate and a Tribunal. It was accountable to the Royal Board of Trade of the Kingdom. Carlos III ratified this in 1760. This new agency defended the interests of traders, merchants and industrialists, mainly calico printers, until it disappeared in 1847. By then there were already other entities that represented the interests of industry.

³¹ In 1766, Descamps published in France his *Discours sur l'utilité des Écoles gratuites de Dessin en faveur des Métiers*. In turn, in 1775, the Spanish Enlightenment thinker Pedro Rodríguez de Campomanes (1723–1802) published *La educación popular de los artesanos* that promoted in Spain the creation of public drawing schools on the French model. For the history of this model, see

Patrick Raynaud (ed.) *Histoire de l'École Nationale Supérieure des Arts Décoratifs (1766–1941)*, Paris, ENSAD, 2004. As for the idea of delineation, it emerged in France through the drawing classes of the Conservatoire des Arts et Métiers that began some years later and that resulted to the theory of line drawing characteristic of the second half of the nineteenth century. As regards the establishment of similar schools in Spain, we should mention those in the Basque Country (from 1774), in Jaca (1783), Zaragoza (1784), Burgos (1786), Palma de Mallorca (1797) and, in Catalonia, Tàrraga (1778) and Olot (1783). Manuel Ruiz Ortega, *Op. Cit.*, 1999 published as an annex the correspondence between the Escuela de Barcelona and some of them.

³² Manuel Ruiz Ortega, *Op. Cit.*, 1999, pp. 107ff.

³³ See Thomson 1989, *Op. Cit.*, p. 90: "Once the calico-printing industry was established on a large scale, a further factor contributing to the extent of the concentration in the industry would have been the development of externalities. One example of this is the existence of drawing and engraving skills, both crucial to the industry's success. Barcelona's Escuela de Bellas Artes, founded by its Junta de Comercio in 1775 to provide instruction in these subjects, had 500 pupils four years later."

³⁴ Frederic Marès, *Dos siglos de enseñanzas artísticas en el Principado*. Barcelona Cámara de Comercio, 1964, p. 36

³⁵ A detailed account of the text of these tests for the subjects of flowers, ornaments or other categories, according to the evolution of the curriculum, can be found in Frederic Marès, *Op. Cit.* 1964. For an account of the exams from the perspective of the drawing methods taught in the school, see M. Ruiz Ortega, *Op. Cit.* 1999.

³⁶ Opinion of Pere P. Molas on the arts, Barcelona 1778. Both documents cited by Frederic Marès, *Op. Cit.*, 1964, pp. 45 and 43 respectively.

³⁷ For a discussion by sectors and occupations on the design and business criteria dominant in Spain during the Industrial Revolution, see Antoni José Pitarch and Núria Dalmases, *Op. Cit.* 1982. As regards the valuation of the American market, there has been much discussion about its importance for the development of the Catalan textile industry. The eighteenth-century Catalan industrialists had already been thinking about selling their fabrics and products in America for a long time before Carlos III opened American trade to all Spanish ports, but it was in that move that the cycle of American cotton imports and export of fabrics was completed. For a review of the different historiographical assessments of the issue, see J. M. Delgado Ribas, "La industria algodonera catalana (1776– 1796) y el mercado americano. Una reconsideración" in *Manuscrits*, 7, 1988, pp. 103–115; this article, in turn, resumed the debate within the economic history of Catalonia. For the history of design it is important to know how to approach the colonial market—whether it was seen as a domestic market considering that, as noted by Delgado (1988) but also by Thomson (1989), it was fully subject to protectionist laws enacted by Madrid for all the Empire, or

whether, due to the fact that this part of the Empire received, quite naturally, goods from all the major European powers—for example, England and Holland—to all effects and purposes they should be considered comparable to an export market. Only in the latter case could the American market serve as an incentive for the Catalans' fabrics and patterns to be constantly renovated and original designs with sufficient added value created to defeat the English, French and Dutch competition on anything other than price. In fact, the difficulties in accessing this market caused by the various wars against England—those of 1779–1783 and of 1796–1801—with subsequent loss of Catalan presence in this market that was already clearly dominated by English goods, and then by the liberation movements and subsequent independence of the continent from the Napoleonic Wars onwards, explains what has been a constant of the Catalan industry—namely, according to Ernest Lluch's thesis, that the great contribution of Catalonia to Spain's economic development was to organise the domestic market. See Ernest Lluch, *La Catalunya vençuda del segle XVIII. Foscors i clarors de la il·lustració*, Barcelona, 62, 1996. Then, throughout the nineteenth century, Barcelona industrialists were characterised by defending clearly protectionist policies that allowed them to dominate the domestic market—this, in turn, meant that as far as design was concerned there was little incentive for cultivation and development. One may well wonder if this is not one of the reasons for the great delay in establishing the design culture in Barcelona referred to by Enric Bricall, considering that some more enlightened manufacturers thought in terms of foreign trade. Bricall 1991, 1996, Arts. Cit.

³⁸ Quoted by Ruiz Ortega, *Op Cit.*, 1999, pp. 58–60.

³⁹ The Spanish word *cursi* is difficult to translate. It has often been proposed that it has a semantic relationship with the German word *kitsch*, but they are not fully equivalent since the Spanish word carries an aesthetic and moral judgement, since behaviour can also be *cursi*. The term emerged during the early nineteenth century and spread throughout the whole century. It was originally used to describe the customs and practices of the new rich. There is abundant literature on the subject in Spanish.

⁴⁰ In fact, by this time, in Spain, the word *diseño* had completely fallen into disuse, or else had already been fully assimilated into drawing. It is easy to realise how important it would have been to have it. See the article by Pilar Vélez in this book.

⁴¹ See the article by Teresa M. Sala, Mireia Freixa and Anna Calvera: "Rethinking the Significance of Catalan Modernisme in the History of Design in Barcelona" in this book.

⁴² Comment written in the minutes of the final awards of the 1827 course, at the Llotja. Marès, *Op Cit.*, 1964, p. 146.

⁴³ The reference literature on the debate on Catalan art industries and their relationship with design is: the study of Pitarch and Dalmases cited above; the investigations of Vicente Maestre, such as "De la aplicación del arte a la industria. La regeneración de las manufacturas artísticas en el siglo XIX" in *Historiar*

desde la periferia. *Historia e historias del diseño*. Barcelona, Publicaciones UB, 2001, pp. 31–70. For an overview of the period, see the articles by sector in *El diseño en España. Antecedentes históricos y realidad actual*. Catalogue of the Europalia exhibition, 1985 Brussels. Barcelona: Ministerio de Industria y Energía, ADG FAD, ADI FAD, ADP, BCD, 1985; Antoni José Pitarch: "La cerámica estampada" (57–59); Núria Dalmases: "El álbum de Rigalt" (110–112); Vicente Maestre "La producción de bienes de consumo en Cataluña a mediados del siglo XIX: 1840–1860" (98–103). The most recent reference book is Pilar Vélez (ed.) *Dos siglos de disseny a Catalunya 1775–1975*. Barcelona: Reial Acadèmia de Bones Lletres, 2004. The same author, Pilar Vélez, addresses the issue in this book, considering the continuity between the nineteenth-century and Enlightenment debate.

⁴⁴ In 1857, Luis Rigalt, a teacher at the Llotja School in Barcelona, published a book that, by example, hoped to guide the various industrial arts so that they might regain their sense of direction. This plan, presented as a catalogue of useful suggestions to inspire businesses, craft workshops and other operators, consisted of a repertoire of role models to imitate that has often been compared to Owen Jones's *Grammar of Ornament* published just one year earlier. Luis Rigalt: *Álbum enciclopédico pintoresco de los industriales*. Colección de dibujos geométricos, en perspectiva de objetos de decoración y ornato, en los diferentes ramos de albañilería, jardinería, carpintería, cerrajería, fundición, ornamentación mural, ebanistería, platería, joyería, tapicería, bordados, cerámica, marquetería, etc. con una serie de adornos de todas las épocas del arte, aplicables a las variadas secciones anteriores, para la correspondiente aclaración y estudio de las mismas, Barcelona, 1857. For a discussion of the Album, see Pitarch and Dalmases, *Op. Cit.*, 1982; and Dalmases, "Art. Cit.", 1985, pp. 110–112.

⁴⁵ This does not mean that there were no other factories in the country. According to Pitarch & Dalmases, *Op Cit.*, 1982, some non-royal factories were created with a more industrial mentality, and their production was clearly aimed at a wider public than the Court. To give an example, if porcelain was the predominant item produced in the royal factories, others, like the Sargadelos factory in Galicia or the famous and enduring Cartuja de Sevilla, the Pickman factory, opted for pottery production following the English model.

⁴⁶ Good examples of these new professionals are Josep Fiter i Inglés (1857–1915), a producer of lace made by hand or machine, or his contemporaries Santiago Brugarolas, designer of samples and patterns, and Jaime Brugarolas, who in addition to drawing models for lace and embroidery, also published them in a magazine.

⁴⁷ Jan Mukarovsky once said that decorative arts of international Art Nouveau were characterised by the creation of "useful objects that it's a shame to use." *La funzione, la norma e il valore estetico come fatti sociali*. *Semiologia e sociologia dell'arte*. Turin: Einaudi, 1971.

⁴⁸ Thorstein Veblen, (1899) *The Theory of the Leisure Class*.

ANA CURRALO

[ID+] Research Institute for Design, Media and Culture
Instituto Politécnico de Viana do Castelo
Portugal
anacurralo@estg.ipvc.pt

7 IDENTIDADE GRÁFICA DOS PRIMEIROS TRATADOS MUSICAIS IMPRESSOS EM PORTUGAL *

107

* PAPER ORIGINALLY PUBLISHED IN: RAPOSO, DANIEL; NEVES, JOÃO;
PINHO, FRANCISCO; SILVA, JOSÉ (EDS.) - INVESTIGAÇÃO E ENSINO EM
DESIGN E MÚSICA. CASTELO BRANCO: EDIÇÕES IPCB, 2017.
ISBN 978-989-8196-63-7. P. 81-86.

RESUMO

O presente artigo surge da necessidade de conhecer e analisar os elementos gráficos que compõem as primeiras tratados musicais impressas em Portugal no séc. XVI.

Estas obras fazem parte do legado cultural nacional não só na vertente histórica, mas também como testemunho tangível e peça integrante do espólio das áreas de design gráfico e da história da música em Portugal, concretizando os laços partilhados pelas duas artes e ciências. As páginas dos objetos de estudos permitem, por meio de observação e análise metódicas, extrair conclusões sobre os primórdios das artes gráficas em Portugal. Pretende-se com este estudo configurar um contributo à difusão do conhecimento científico, alimentando o entendimento acerca do passado com vista à construção de um edifício sólido de saberes para exploração e desenvolvimento pelas gerações futuras.

ABSTRACT

This article arises from the need to identify and analyze the graphic elements composing the first musical theory Treatises printed in Portugal in the 16th century.

Part of the national cultural legacy in historical terms, these works are also tangible testimonies and integrating pieces of the Portuguese heritage in graphic design and history of music, materializing the shared bond between the two arts and sciences. The present study aims to contribute towards the dissemination of scientific knowledge, improving the understanding about the past in order to build solid foundations for knowledge development by future generations.

Keywords: Portuguese typography, graphic design, music books/ pieces of music, print culture, book history, history of music

INTRODUÇÃO

Ainda que a maioria dos autores identifique o período da Revolução Industrial como a génese do Design Gráfico, não poderemos alhear-nos dos argumentos que o endereçam para a idade da invenção de Gutenberg, no século XV. Se considerarmos, por exemplo, às considerações de Gilles Dorfles, estamos perante um objeto de desenho industrial quando nele coexistem três fatores: a fabricação em série, a produção mecânica e a presença de um quociente estético que é fruto de um traçado inicial (Dorfles, 1978). Trezentos anos antes da Revolução Industrial, os caracteres de metal obrigaram a escrita a entrar num sistema produtivo em série que fundamentou a necessidade de diagramar uma página.

A tipografia¹ em Portugal nasce no período quatrocentista e, com ela, os primeiros impressores e oficinas tipográficas, locais onde se desenvolve a produção de livros hebraicos, até ao ocaso do século XV. Só no período de transição do século XV para o século XVI a sociedade cristã despertou para "o poder do livro", transformando-se na sua disseminadora, com os principais agentes as incontornáveis autoridades religiosas – bispos e clérigos – e, obviamente, os próprios impressores (Anselmo, 1991).

O presente artigo tem como objeto de estudo das soluções da composição tipográfica das primeiras obras musicais impressas em Portugal. Este estudo pretende analisar as primeiras obras musicais, por meio de observação e análise metódicas, extrair conclusões sobre a composição gráfica e os seus impressores. Neste âmbito, é intuito deste estudo interpretar a estrutura gráfica das primeiras obras musicais impressas no território Nacional, tendo como apoio documentos da história do livro em Portugal e do design de comunicação, aplicados na vertente das artes gráficas.

DESCODIFICAÇÃO GRÁFICA DAS PRIMEIRAS OBRAS MUSICAIS

A sociedade portuguesa, na primeira década do século XVI, foi berço de novas perspetivas na evolução social, cultural e artística. São marcas distintivas do Renascimento que, conjugadas com os descobrimentos, facilitaram alterações no pensamento científico.

A aplicação dos caracteres móveis aos símbolos da escrita musical, foi iniciada em Itália e na França nas primeiras décadas de Quinhentos entrando rapidamente em Portugal.

Foi D. João III quem incentivou as artes da impressão musical. Os dois primeiros livros de música que se imprimiram em Portugal, foram os *Tractado de Canto Llano* (1533) e *Tractado de Canto Mensurable* (1535) pela iniciativa do espanhol Mateus de Aranda e impressos em Lisboa por Germão Galharde. (Cardoso e Miranda, 2012).

A análise e codificação dos elementos gráficos das referidas obras tem como objetivo aferir o conjunto de ações e soluções gráficas que convergem para o objeto de estudo, mediante o entrecruzamento formal de um domínio de perceção explícita e implícita. Entendemos, assim, como nível formal explícito os elementos que visualizamos concretamente nas páginas dos Tratados, como nível formal implícito, os meios envolvidos na sua configuração e organização, bem como o que esses elementos gráficos representam ou expressam (Aires, 2006). Em concreto, como elementos formais explícitos, são submetidos a análise os caracteres que compõem o texto de cada obra, as imagens, as tarjas ou vinhetas e os símbolos tipográficos, ou seja, os elementos físicos presentes no campo visual do objeto de estudo, que compõem a mensagem, e a solução gráfica, que se encontra circunscrita pelas teorias aplicáveis à prática do design.

AS FOLHAS DE ROSTOS

Nas Figs. 1 e 2 podemos visualizar as folhas de rosto dos *Tractado de Câto Llano* e *Tractado de Canto Mensurable* de Mateus de Aranda, um músico e compositor contratado em 1528 para substituir o mestre de capela do Cardeal Infante D. Afonso (1509–1540), na cidade de Évora, sendo responsável pela implementação da escola de música conhecida como Escola da Sé. (Cardoso e Miranda, 2012).

As folhas de rostos dos Tratados, são muito idênticos; compostos por uma estampa, cercaduras e de caracteres góticos. A estampa é representativa ao brasão eclesiástico do Cardeal Infante D. Afonso, encontrando-se em grande destaque na parte superior da folha de rosto e na parte inferior deparamo-nos com a identificação da obra impresso em caracteres góticos. Ambos os elementos estão emoldurados com cercaduras decorativas.

Foi em pleno século XIV que surgiram os primeiros manuscritos decorados com motivos heráldicos. Estes nasceram na sequência do que tipificava a sociedade medieval: a vida acantonada em regiões diversas que se distinguiram e notabilizavam esteticamente através dos selos pendentes, das bandeiras e da ordenação dos escudos de armas (Norton, 2001).

Os brasões tornaram-se elementos de uso comum, quer para guerreiros, quer para a nobreza e, por conseguinte, desenvolveu-se uma linguagem articulada com vista a regular e descrever a heráldica civil. Na época de quinhentos a vida nas cidades encontrava-se impregnada pelos emblemas que eram ostentados nas paredes dos edifícios públicos, nas igrejas, nos colégios e, de forma não menos significativa, nas insígnias das casas.

Por meio desta diversidade de aplicações, a ação do campo da heráldica passou a englobar um “sem número de manifestações da cultura humana”, desde a história da sociologia, da arte e da religião, até à bibliografia ou filosofia, expressando a cultura



Figura 1. Folha de rosto do *Tractado de Câto Llano* (1533). Impresso em Lisboa por Germão Galhardo.



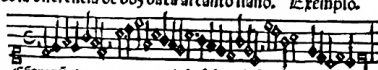
Figura 2. Folha de rosto do *Tractado de Canto Mensurable* (1535). Impresso em Lisboa por Germão Galhardo.

rio que se constituyen en las figuras: lo qual es la principal menfura. La segunda por la compoficion: y harmonia de las voces en confonancia. La tercera por las maneras de compas: como en la tercera conclusion fe ha dicho. y para demostrar y traer effas tres cosas en efecto es necelfario confiderar los circulos fi fon medios o enteros: y fi tienen puntos en el medio o no: para faber las figuras que fon binarias o ternarias. Las quales fe han de entender primeramente por figuras: como fe demueftran en la primera conclusion: por numero de dos y de tres: y no por compases. y porque como el compas efte en voluntad de cantores: y de aquellos que componen: vnas vezes el bieue ternario valdra quatro compases y medio: y otras vezes vno y medio: y otras vezes vno y afi de las otras figuras: y no aura entero conofcimien to de numero binario ni de ternario: por donde es bien numerar primero las figuras por figuras: y oclpues confiderar los compases que en cada figura fueren constituidos: segun las tres maneras y menfuras de copas: como ya effa dicho en la tercera conclusion. y no como al gunos cantores que quieren cantar todas las obias por la primera manera de vniidad. En femibreue en vn compas: al qual llamā compafillo: y no tienen razon: porque fi todo fe viera de cantar por la primera manera de copas todo fuera igualdad: y no efaramos de ninguna proporcion. y figuendo las dichas tres maneras de compas de la segunda manera a la primera es dupla proporcion: y de la tercera manera a la segunda es fcrqualtera proporcion: y tripla a la primera: de las quales proporciones refultan otras muchas. y cada manera de compas muestra fu tharmonia y diferencia y melodía y gracia de canto: y por lo qual es bien fequir las dichas tres maneras de compas quando fe demoftraren: y no

Figura 3. Página do Tractado de Canto Llano

Conclusion quarta de contrapuncto diminuto:
y mifion de difonancias.

Que fe ha de entender y faber el contrapuncto llano que fe demueftra de vn fonido a otro y igualmente con el canto llano de todos los modos: fe ha de entender y faber contrapuncto diminuto: el qual es mifion de figuras diminutas y femibreues: y effo en tres maneras. La primera coliruyendo el canto llano de femibreues: el contrapuncto a vn femibreue puede dar dos fonidos o tres o quatro o mas: los quales fe daran con femibreues fin copados: y con minimas fueltas: o teniēdo al gun punto que haga fin copas: y con feminimas: formando intervallos de confonancias: y difonancias: las quales fe forman vnas entre otras fubiendo o defcendiendo de recha mēte el contrapuncto: y en claufulas. y es de faber q las difonancias: f. fegūda. quarta mayor. feptima. nouena. c. n. zena. ca rozena. de zio chena. v. ciutena: fe han de formar de fpues de dado el golpe del compas. y en las claufulas de fpues del golpe: y en el golpe de otro. por lo q es de faber q dos figuras antes del final ha de fer feptima: fenefciendo el canto llano en octaua: o fegūda fenefciendo en vnifon. Lo q y todo lo fobredicho fe vera en los figuientes exēplos de contrapuncto diminuto. de los quales al canto llano fegūdo modo pñefce fe demueftra formaciō de principio y fin. y quinta y octaua de la diferencia de triple al canto llano. y vnifon y octaua y quinta q la diferencia de tenor da con el canto llano. y dos quintas vna en alto y otra en baxo de la diferencia de voz alto al canto llano. y quinta y octaua y quinta de la diferencia de voz baxo al canto llano. Exēmplo.



Contrapuncto para voz de triple: sobre el canto llano pñefce.

Figura 4. Página do Tractado de Canto Mensurable

humana através de elementos gráficos detentores de uma forte carga simbólica (Matos, 1940). As folhas de rosto da época quinhentista não escapam as idênticas premissas e, amiúde, encontramos ilustrado o brasão do mecenas (Figs. 1 e 2).

Na folha de rosto dos Tratados, podemos atentar uma combinação de tarjas decorativas ornadas por elementos vegetais. Esta cercadura exhibe delicados contornos desenhados, contendo desenho a branco, com motivos florais em fundo preto. No pedestal podemos visualizar o nome do impressor.

Seguindo o modelo dos manuscritos, cada página, quer do texto, quer da ilustração ou de uma combinação de ambos, tinha uma cercadura decorativa, vulgarmente feita de quatro ou mais pranchas (McMurtie, 1932). Estas xilogravuras instituíram um padrão na ornamentação de livros que, conquanto não fosse definitivo, foi subsistindo sem rival até à época de William Morris² e seus discípulos.

PAGINAÇÃO E COMPOSIÇÃO GRÁFICA

Na prensa tipográfica quinhentista, todo o espaço era preenchido e tangível, constituído por uma peça de metal ou madeira. As letras e palavras ficavam separadas por lingotes de chumbo e fatias de cobre, tão físicos como todos os caracteres à sua volta. Por sua vez, as linhas de caracteres dividiam-se, entre si, por finas tiras de chumbo, inseridas numa "mobília" de blocos mais largos, que continham as margens da folha. Tratava-se de um processo rudimentar, que permitia frequentemente que o papel deslizasse ao passar pelo prelo, num movimento que afetava de imediato a horizontalidade e precisão dos caracteres e linhas. Neste sentido, o tipógrafo trabalhava numa avaliação contínua dos espaços entre os caracteres, palavras, linhas de palavras e, talvez até, parágrafos (Jury, 2006). A tarefa do tipógrafo pautava-se pela composição do texto e pela organização do espaço visual das páginas, servindo também a uma intenção de funcionalidade.

Relativamente à paginação dos Tratados, graficamente são muito semelhantes, exibindo nas suas páginas um bloco de texto, centrado e simétrico com corpo³ corrido, fluindo as linhas dos parágrafos e interrompido pelas pautas musicais, como podemos visualizar na Fig. 3. Na mesma figura, podemos visualizar as notas musicais, que representadas visualmente por losangos.

As páginas que compõem os Tratados (Figs. 3 e 4) apresentam uma mancha com forma de retângulos compactos – *justificação* – exibindo margens que traçavam linhas retas. A bem da verdade, a configuração assumida pela mancha de texto, dependia sobretudo do material e tecnologia que o tipógrafo houvesse ao seu dispor e da permanente alusão ao conceito de simetria. Com simetria, recordamos não apenas a etimologia grega (*symmetria* significava medida, harmonia, ou proporção correta) mas também a sua definição matemática que, embora mais restrita, integra o conceito de formas análogas cuja repetição cria padrões.

112

Conjuntamente, ao longo do texto encontramos sinais de pontuação como: o ponto final, a vírgula e em especial a marca de parágrafo, que são recursos amplamente utilizados pelo impressor, não somente como sinais de pontuação, ou acessórios que estruturam o texto, mas também como elementos decorativos. Estes são recurso gráfico intrínseco à mancha de letras do alfabeto, pela estruturação do texto que proporcionam, pelas pausas que estabelecem ou como moduladores da entoação durante a leitura. Para Ellen Lupton e Abbott Miller, “a história da tipografia e da escrita poderia ser redigida como o desenvolvimento de estruturas formais que exploraram a fronteira entre o interior e o exterior dos textos” (Lupton e Miller, 1996).

AS LETRAS INICIAIS

A tipografia nasceu numa era de transcrição e confusão, numa época em que poderosas forças⁴ modificavam curso da civilização. Esta arte acelerou o

processo de transformação, prestando-se ao papel de largamente propalar o conhecimento e o saber.

O surgimento dos primeiros ornatos individuais ficou registado nas grades letras iniciais, gravadas em madeira ou metal, que começaram por exibir elementos modestamente decorados para paulatinamente adotarem contornos mais minuciosos, até atingir formas acintosamente adornadas.

As páginas dos Tratados apresentam capitulares xilográficas no início do texto. Na Fig. 3 podemos observar a letra capitular/inicial xilográfica que representa a letra inicial “D” envolvida por elementos fitomórficos. Segundo Pina Martins, as ilustrações do livro português de quatrocentos e quinhentos são, quase unicamente talhadas em madeira, isto é, xilográficas (Martins, 1969).

Na sua génese, o desenho de gravuras procurou estabelecer uma relação entre o elemento figurativo e a obra em que figurava e, segundo João Alves Dias, as primeiras capitulares gravadas em Portugal serviram a esse objetivo particular. Eram ideadas com recurso a elementos da heráldica, porém, como tal prática excluiu a sua utilização em diferentes obras, foi imperioso dar cedência a outras temáticas, aplicáveis em detalhes ornamentais (Dias, 1994).

OS CARATERES TIPOGRÁFICOS

Eric Gill define tipografia como a reprodução de grafia por meio de caracteres móveis. Originalmente, esta reprodução era obtida pela pressão contra a face do papel ou pergaminho, da superfície, ou “olho”, de uma letra de madeira ou metal, impregnada de tinta (Gill, 2003).

Tratava-se de um processo executado com recursos de grandes limitações técnicas quando comparados com os que hoje conhecemos: as irregularidades do papel e a sua aspereza; as desigualdades dos tipos, não só na superfície de impressão, mas também na

dimensão do corpo de cada caractere; a imperfeição mecânica com que as prensas eram construídas e os métodos de impressão. Somados, estes fatores converteram o trabalho dos primeiros tipógrafos em páginas facilmente identificáveis, pelas irregularidades, imperfeições e falta de homogeneidade que manifestam (*ibidem*).

Apesar dos caracteres romanos se encontrarem em Portugal desde a década de trinta, não foi antes da década de sessenta que estes se impuseram no panorama tipográfico. O público português, ao contrário do italiano e francês, manteve-se fiel ao desenho de letra marcadamente germânica, o gótico, mais por uma questão de gosto do que por motivos económicos. Se em 1536 se publicava em Coimbra a primeira edição impressa com caracteres romanos, em Lisboa, pela mesma altura, imprimia-se ainda com caracteres góticos, reservando os romanos apenas para alguns ensaios ocasionais em títulos e subtítulos.

Segundo João Dias, no início do século a produção nacional manteve-se fiel afins ao desenho de letras marcadamente germânico, o gótico, ao contrário das transformações que se haviam consumado em Itália. Porém, o gótico foi submetido a alterações e na Península ibérica adotou-se o gótico redondo. A utilização de caracteres góticos redondos manteve-se até o final do século XVI coexistente com os romanos e os itálicos. A introdução de caracteres romanos em solo nacional só se verificou em 1534, no caso das maiúsculas, e no ano seguinte, as minúsculas. Em 1536 adquirimos os itálicos, reservados somente para a informação que permanecia acessória ao título (Dias, 1998).

O IMPRESSOR DOS PRIMEIROS TRATADOS MUSICAIS IMPRESSOS EM PORTUGAL

O francês Germão Galharde foi o impressor responsável pelos primeiros tratados musicais.

Germão Galharde, foi durante quarenta anos o principal "animador do comércio de livros" (Anselmo, 1988) exercendo a atividade tipográfica, entre 1519 e 1560, que correspondem a uma produção de um considerável número de livros⁵. Entre 1530 e 1531, Galharde interrompeu a sua habitual atividade para montar a tipografia do Convento de Santa Cruz⁶. A sua missão incluía também o ensino do ofício aos monges de Santa Cruz⁶, pelo que se manteve na cidade durante um curto período de 9 meses, regressando pouco depois a Lisboa, onde viveu até ao fim dos seus dias.

Os primeiros anos da imprensa de Santa Cruz são os mais ativos e também aqueles em que se abrem novos modelos gráficos. A sua missão incluía também o ensino do ofício aos monges de Santa Cruz, pelo que se manteve na cidade durante um curto período de 9 meses, regressando pouco depois a Lisboa, onde viveu até ao fim dos seus dias.

Na primeira metade do século XVI, a aquisição de novo material tipográfico era luxo a que poucos impressores se podiam entregar, quedando-lhes apenas, como hipótese mais viável, a aquisição de equipamento a outro impressor mais velho. Por esse motivo, era comum que elementos gráficos fossem reutilizados, de livro para livro, apresentando diferenças apenas quanto aos esquemas de enquadramento.

CONSIDERAÇÕES FINAIS

Os primeiras obras musicais impressas em Portugal foram os *Tractado de Câto Llano* e *Tractado de Canto Mensurable* da autoria do espanhol Mateus de Aranda e impressas pelo francês Germão Galharde. Nas folhas de rosto dos *Tratados* exhibe o brasão do mecenas da obra, Infante Cardeal D. Afonso. Na época de quinhentos, os tipógrafos não dispunha de meios de autofinanciamento permaneciam na contingência de pedir ajuda aos mecenas, como as instituições religiosas, a Casa Real e particulares que pudessem patrocinar a impressão das obras. Independentemente das razões havidas pelo Infante Cardeal D. Afonso

para este investimento, foi indubitavelmente graças a ele que possibilitou a impressão dos Tratados cooperando assim para um enriquecedor legado da cultura musical e gráfica em Portugal. Além do brasão eclesiástico, as folhas de rosto apresentam um texto identificador da obra, impresso a gótico e as cercaduras de inspiração renascentista. O texto é apresentado é formado por uma pequena mancha de texto uniforme, constituído por 7 linhas de texto e impresso com caracteres gótico. A paginação é composta por densas colunas de texto e capitulares xilográficas no início do texto. A mancha densa de texto é interrompida pelas pautas musicais e os símbolos gráficos a que correspondem as notas musicais.

A gestão da forma e espaço, nas folhas quinhentistas apesar de limitados à prensa tipográfica, era consequência da tecnologia existente na época. Descodificamos as relações gráficas das primeiras obras musicais como sendo algo que está incorporado no nosso campo visual. Pelo simples facto de ver, o olho fragmenta e descremina as organizações gráficas, como refere Otl Aicher (2004).

Na realidade, só vemos uma fração das diversas formas e das diversas fontes de luz que nos chegam à retina. Só vemos aquilo que tem significado para nós, fazendo uma seleção. Se nos detemos um segundo e observarmos tudo aquilo que está dentro do nosso campo visual, constatamos rapidamente o pouco que normalmente apreciamos (Aicher, 2004). Por mundo visível entende-se uma soma ininterrupta de fragmentos, de soluções gráficas, que formam um cenário contínuo, no qual participamos.

NOTAS

¹O termo tipografia refere-se, atualmente, ao um conjunto de processos que incluem a criação e utilização de símbolos visíveis, relacionados com a composição digital de um texto. A tipografia encontra-se associada ao design gráfico em geral, com o objetivo de ordenar, estruturar e dar forma à comunicação visual. Fonte: Lupton, E. (2004). *Thinking with type: a critical guide for designers, writers, editors, & students*. New York: Princeton Architectural. Mais recentemente a disciplina de estudos tipográficos ocupa-se do desenvolvimento e conceção de caracteres/fontes digitais e todos os aspetos que influenciam a aparência dos caracteres tipográficos numa página, num ecrã ou noutro substrato plano ou 3-D e ainda dos aspetos que contribuem para a eficácia da informação ou da exposição tipográfica. Fonte: Jury, D. (2007). *O que é a Tipografia?*, Barcelona, Editorial Gustavo Gill. No idioma português tipografia é também a oficina onde se realizam as atividades tipográficas.

²William Morris (1834–1896) foi um dos principais fundadores do Movimento de Artes e Ofícios britânico. Era pintor – de papéis de parede, tecidos padronizados e livros – além de escritor de poesia e ficção e um dos fundadores do movimento socialista na Inglaterra. William Morris, [Acedido em Dez. 2016]. Disponível em <http://www.morrisociety.org/morris/bio-salmon.html>

³O bloco principal é frequentemente chamado de “corpo de texto” e contém o principal volume do conteúdo.

⁴Intelectualmente, a Europa foi agitada por duas forças. O movimento religioso, entre classes média e baixa, mais tarde culminou a Reforma Protestante e o movimento do Humanismo.

⁵Para a lista de obras impressas por Germão Galharde, consultar: Anselmo, A. J. (1926) *Bibliografia das obras impressas em Portugal no século XVI*. Lisboa: Biblioteca Nacional.

⁶O Mosteiro de Santa Cruz de Coimbra foi fundado em 1131 por D. Telo (São Teotónio) e 11 outros religiosos, que adotaram a regra dos Cónegos Regrantes de Santo Agostinho. A sua escola, como uma das melhores instituições de ensino do Portugal medieval, possuía uma grande biblioteca (agora na Biblioteca Pública Municipal do Porto) e um ativo scriptorium. Nos tempos de D. Afonso Henriques, primeiro monarca português, o scriptorium de Santa Cruz foi usado como máquina de consolidação do poder real. D. Afonso Henriques e seu sucessor, D. Sancho I, foram lá sepultados, o que evidencia a sua importância. Na Idade Média, o mais famoso estudante do mosteiro de Santa Cruz foi Fernando Martins de Bulhões, o futuro Santo António de Lisboa (ou Santo António de Pádua). Em 1220, o religioso assistiu à chegada, ao mosteiro, dos restos mortais de cinco frades franciscanos, martirizados em Marrocos (os Mártires de Marrocos) e decidiu fazer-se missionário e partir de Portugal. Foi no início do século XVI que o rei D. Manuel I ordenou uma grande reforma, que reconstruiu e redecorou a igreja e o mosteiro – fase durante a qual também os restos mortais de Afonso Henriques e Sancho I foram trasladados dos antigos sarcófagos originais para outros túmulos, redecorados em estilo manuelino. – In Mattoso, J. (Coord.) (1994). *História de Portugal*. Lisboa: Editorial Estampa.

REFERÊNCIAS BIBLIOGRÁFICAS

Aires, E. F. V. C. S. (2006) *A estrutura gráfica das primeiras páginas dos jornais: O Comércio do Porto, O Primeiro de Janeiro e Jornal de Notícias entre o início da publicação e final do séc. XX: contributos para uma ferramenta operacional e analítica para a prática do design editorial*. Dissertação de doutoramento em Design de Comunicação, Faculdade de Belas Artes da Universidade do Porto, Porto, Portugal.

Anselmo, A. (1991). *História da edição em Portugal: das origens até 1536*. Porto: Lello & Irmão.

Aicher, O. (2004) *Typographie* (trad.castelhanoTipografia) Valencia: Campgràfic.

Cardoso, J. M. P. (2002). *Em busca do peculiar na música sacra portuguesa dos séculos XVI, XVII E XVIII*. Coimbra: Imprensa da Universidade de Coimbra.

Curralo, A.F.G. (2013) *Classificação gráfica e tipográfica das folhas de rosto quinhentistas das obras impressas em Portugal. Contributos para um legado no âmbito do Design de Comunicação*. Dissertação de doutoramento em Arte e Design, Faculdade de Belas Artes da Universidade do Porto, Porto, Portugal.

Dias, J. J. A. (1998). *Nova forma da transmissão do «verbo» – A Imprensa*. In Serrão, Joel;

Marques, A. H. de Oliveira (dir.) – *Nova História de Portugal*. Portugal do Renascimento à crise dinástica. vol. V. Lisboa: Editorial Presença.

Dias, J. J. A. (1994). *Iniciação à bibliofilia*. Lisboa: Pró-Associações Portuguesa de Alfarrabista, 1994.

Dorfles, G. (1978). *O design industrial e a sua estética*. São Paulo: Presença

Gill, E. (2003) *Ensaio sobre tipografia*. Coimbra: Almedina.

Jury, D. (2006). *O que é a tipografia?*. Barcelona: Editorial Gustavo Gili

Lupton, E.; Miller, A. (1999), *Design Writing Research – Writing on Graphic Design*. London: Phaidon.

MARTINS, J. V.P. (1969). *Livro português: iconografia*. In Coelho, Jacinto do Prado (dir.) – *Dicionário de literatura*. Porto: Livraria Figueirinhas.

McMurtrie, D. C. (1982). *O livro : impresso e fabrico*. Lisboa : Fundação Calouste Gulbenkian.

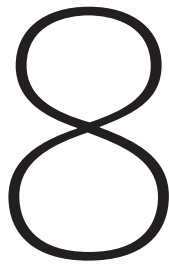
Norton, M. A. (2001) *A heráldica em Portugal: raízes simbologias e expressões histórico-culturais*. Dissertação de doutoramento em História, Universidade do Minho, Braga, Portugal.

SANDRA ANTUNES

[ID+] Research Institute for Design, Media and Culture
Instituto Politécnico de Viseu¹

Portugal

sandravalenteantunes@gmail.com



WAYS OF PARTICIPATING IN THE CURRENT MUSEOLOGICAL DISCOURSE ON DESIGN*

117

*PAPER ORIGINALLY PUBLISHED IN: BRANCO, VASCO; SEMEDO, ALICE; PROVIDÊNCIA, FRANCISCO; BARBOSA, HELENA (COORD.) – CONSEQUÊNCIAS: HISTÓRIA, MUSEOLOGIA E MUSEOGRAFIA DO DESIGN PORTUGUÊS - PROJETO E PENSAMENTO. PORTO: UNIVERSIDADE DO PORTO, UNIVERSIDADE DE AVEIRO, 2015. ISBN 978-989-8648-60-0. P. 50-54.

The museum as a cultural space has changed over the years. From the first museological forms, dating back to the end of the Middle Ages and the beginning of the Renaissance period (Pérez, 2009), known as "cabinets of curiosities," these spaces, accessible to a restricted public, "projected the collector's view of the world" (2009, p. 178) and were characterized by an accumulation of objects, at times without classification or any particular relationship between them. Great museums such as the National Gallery of London and the Louvre of Paris opened in XVIII century. These museums began to open to a wider public and the museum as a cultural centre began to acquire the shape we have today, exercising functions and tasks of conservation, collection, study, ordering, exhibition, welcoming visitors and exercising pedagogical activities.

The current technological reality, marked by the invention of the World Wide Web (Web) and its ubiquity, allows the museum access to new tools, new forms of exhibiting and relating to its public. Today the

museum is open to interdisciplinary cross sections and forms of participation from different actors. It is a place where objects are shown, explained, interpreted, presented and to a certain extent contextualized in their origin and the function they would have had (Rocha-Trindade, 1993, p. 17).

Despite technological change, the museum keeps its three great vocations intact, which according to G. Henri Rivière (1989, quoted by Rocha-Trindade, 1993, p. 69) are: study and documentation; conservation and exhibition; education and culture. Museology of design covers these vocations, however addressing specific questions relating to the design artefact. Design, a field apparently distant from museums for so long, now claims its exhibit space and its place in the house of the Muses. The ancestors of the design museum may be found in the archaeology and decorative arts museums. The former keep and expose artefacts of antiquity, recovered from rubble, exhibited behind closed glass show-cases, catalogued and presented chronologically, with little

captions which somehow try to contextualize the object in the society it has originated from. Decorative arts museums present artefacts emphasizing their aesthetic aspect. Museums dedicated exclusively to design began to emerge associated with independence, which the discipline and profession of design have acquired in western society. A particular characteristic of design museology which distinguishes it to a large extent from art museums, is the fact that the design artefact does not usually having the aura of being a unique object, irreplaceable and unrepeatable, but on the contrary they are objects made principally to be used and not exclusively for aesthetic-contemplative enjoyment (Annicchiarico, 2008). The questions raised by design museology are succinctly and objectively stated in a pamphlet from the Doctorate in Design Sciences of the Design Museology Research Centre of the IUAV University of Venice:

"What should be exhibited in a museum of design: objects or projects? Should they be unique and one of a kind objects? How do we historicize a contemporary and continual evolution? How adaptable are other types of museum to design (natural museums, science, art, and ethno-anthropological heritage museums, etc.)? What problems exist regarding preservation and restoration? What are the problems concerning cataloguing (seeing that there still lacks a standard cataloguing method for the design field)? What gets exhibited and how?" (Department of Art and Industrial Design, 2007, p. 8).

The design museum, which perhaps due to its youth does not bear the weight of tradition of other museums, is therefore in a privileged position to open its space to participative forms which new technology offers. The narratives of use (of the public) and narratives of creation (of the designer), can be integrated into the museological discourse, contextualizing the artefact in new ways and enriching the exhibition. Ellis and Kelly argue that today the

museological sector tries to appeal to the market of the masses, seeking opinions on its objects and not merely being a repository of "dusty stuff in cases"², and therefore the implementation of strategies of participation in the museum is seen as a bonus. Researcher Mariana Salgado ([w.d]) presents ways of visitors' participation in museum exhibitions in the article "Links between accessibility and participation: multiple voices in the Design Museum of Helsinki." In this study, carried out in the course of the temporary exhibition "The secret life of objects, an interactive map of Finnish design"³, the work hypothesis consisted of incentivizing the visitors' participation in the form of comments, with the supposition that it was possible to create a more accessible exhibition for everyone. To achieve this, before the exhibition, workshops were organized where texts, videos, music and drawings relating to the design objects were produced. Later, these materials were selected and edited, becoming part of an interactive map, encouraging visitors to leave comments, inspired by the objects displayed. Based on the results obtained, Salgado concluded that:

"En la actualidad, cada vez más, el paradigma dentro del museo pasa de estar basado en el objeto que se exhibe, a considerar el contexto que lo rodea. Entonces resulta crucial proponer la exposición como un elemento vivo. Los visitantes, entonces, le darán contexto a los objetos expuestos a través de sus historias de uso, percepciones o interpretaciones. Por este motivo considero que los comentarios generados durante la exposición tendrían que considerarse seriamente como parte de nuestro patrimonio cultural e industrial. Esta intervención de los visitantes en el museo representa la relación afectiva y las situaciones de uso de los objetos en nuestra sociedad (...). Abrir la exposición hacia la controversia, a partir de aceptar varias voces, es una manera de proponer un museo para todos. Mostrar y exhibir la diferencia en la forma de interpretar la exposición es una

táctica para propiciar el debate y facilitar el diálogo" (Salgado, [w.d]).

"Nowadays, we increasingly find that the museum paradigm changes from being based on the exhibited object to considering the surrounding context. It is therefore crucial to propose the exhibition is a living element. The visitors will then give a context to the objects exhibited through their tales of usage, perceptions and interpretations. For that reason I consider that the comments made in the course of the exhibition will have to be seriously considered as part of our cultural and industrial heritage. This intervention of visitors in the museum represents an emotional relationship and the situations of the objects' use in our society (...) Opening the exhibition to controversy, by accepting various voices, is a way of proposing a museum for everyone. Showing and exhibiting differences in the ways of interpreting the exhibition is a tactic to encourage debate and facilitate dialogue" (Salgado, [w.d]).

The study carried out by Salgado is of interest because of the importance given to the visitors' participation in the exhibition, considering not just the object exhibited but also the surrounding context, through the visitors' stories of usage, their perceptions and interpretations, while considering the exhibition as a living element and finally, the idea that by accepting various voices we acquire a museum for all. This author's work focused on a design museum of material artefacts, and suggested new forms of participation for the visitor. Now immaterial artefacts, such as websites designed by Web designers, constitute new artefacts which museums will have to keep and exhibit. In addition to websites' national archives, such as the Archive of the Portuguese Web (www.arquivo.pt) and the Internet Archive (<https://archive.org/web>), which aim to cope with the immaterial, the ephemerality and quick obsolescence of the artefact, the museum will also have to open its door to this essential element of

contemporaneity. An online museum of Web design would allow the artefact (website) to be experienced in the context for which it was created and would allow an inclusion of Web 2.0 forms of participation in a new exhibited model. Here the autochthonous means of communication of the Web could be used to create platforms of natural conversation between museum and visitors, museum and creator (designer) and also between visitor and creator.

To conclude, if the museological space was open to including participation in its different forms, from the consumer (visitor) to the creator (designer), different methods could be combined of contextualizing and enriching the exhibition, creating new narratives, which constitute cultural contributions.

NOTES

¹ At the moment of the publication of the article the author was professor at the Escola Superior Artística do Porto.

² "For years, we have tried as a sector to appeal to mass market, to solicit opinions about our objects, to not 'just be a repository of dusty stuff in cases.'" (Ellis; Kelly, 2007, [s.p.]).

³ It took place in the Design Museum of Helsinki, between 18 March and 1 June 2008.

REFERENCES

- ANNICCHIARICO, Silvana – Un Museo Mutante: La Triennale di Milano – Design Museum. Milão, 2008 [Em linha]. [Consult. 10 jun. 2011]. Disponível em WWW: <URL: http://www.triennaledesignmuseum.it/files/swf/edizione2008/comunicato_ITA.pdf>.
- ANTUNES, Sandra; Interfaces para um museu do web design português, Aveiro: Universidade de Aveiro, 2015. Tese de Doutoramento.
- ELLIS, Mike; KELLY, Brian – Web 2.0 How to stop thinking and start doing: addressing organizational barriers: Museums and the Web 2007 [Em linha]. Toronto, 2007. [Consult. 7 fev. 2012]. Disponível em WWW: <URL: <http://www.museumsandtheweb.com/mw2007/papers/ellis/ellis.html>>
- PÉREZ, Xerardo Pereiro (2009) – Turismo cultural [em linha]. Revista de Turismo y patrimonio Cultural, 2009. Tenerife, Espanha: Pasos. [Consult. 1 agosto 2011]. ISBN 978-84-88429-13-1.
- ROCHA-TRINDADE, Maria Beatriz (1993) – Iniciação à Museologia. Lisboa: Universidade Aberta, 1993. ISBN/ISSN 972-674-104-1.
- SALGADO, Mariana (2008) – Breaking Apart Participation in Museums: Museums and the web. 2008 [Em linha]. [Consult. 20 abril 2010]. Disponível em WWW: <URL: <http://www.archimuse.com/mw2008/papers/salgado/salgado.html>>.
- SALGADO, Mariana [w.d.] – Enlaces entre accesibilidad y participación. Múltiples voces en el Museo de Diseño de Helsinki [Em linha]. [Consult. abril 2010]. Disponível em WWW: <URL: <http://www.mnactec.cat/docs/IS16web/IS16cast/intern.cast.htm>>.

ALEXANDRA BELEZA MOREIRA

[ID+] Research Institute for Design, Media and Culture
Department of Communication and Art
University of Aveiro
Portugal
abmoreira2@gmail.com

9 THE CORRESPONDENCE PRINCIPLE*

123

*THIS ARTICLE WAS PRESENTED AT THE FIRST EDITION OF THE PHILOSOPHY OF THE ARTS CONFERENCE, HELD IN DUBROVNIK, IN 2012, WITH THE SUPPORT OF THE SCIENCE AND TECHNOLOGY FOUNDATION (FCT), AND THE RESEARCH CENTER FOR THE SCIENCE AND TECHNOLOGY OF THE ARTS (CITAR), OF THE CATHOLIC UNIVERSITY, OPORTO.

ABSTRACT

The experience of the photographic image has to be understood broadly, starting from a perceptual experience, extending to an experience involving other cognitive processes, which in turn determine the way we believe in photographic images as depicting the physical objects and events that constitute our environment.

If the perceptual characteristics of the object described in the photographic image match the features of the photographed object, so as to allow the precepts of the photographed object to be formed, we perceive it as a qualified depiction, thus establishing its epistemic status. The correspondence between perceptual experience and the objects represented in that experience is not accidental. It gives us a stable relationship with our environment, ensuring that the way in which we perceive corresponds to the organization of what is perceived. In the photographic image, that correspondence is maintained to the ex-

tent that the camera mechanism is analogous to our perceptual system.

The main concern of this research is how visual precepts are formed and how they are experienced in photographic images. The main steps to approach this subject start with the consideration of photographs as depictions. Photographs are depictions of the photographed object, but the notion of depiction needs to be clarified.

What is the specificity of photographs as images? Here, photographs will be seen as special images in which the appearance present and actual present (Husserl) conflict. Correspondences are argued for in the process of the formation of photographs, starting from perception. In an early stage of visual perception, the brain starts with local feature analysis resulting from contour information to form precepts. Objects are then recognized as visual precepts are formed. In a last stage concepts enable the construction of a meaningful scene.

There are correspondences between: the physiological perception processes and the mechanical side of the formation of photographs; depiction and the photographed object, and correspondences related to the observer's visual experience.

Photographic images as depictions are based on the relationship between the perceptual formation of visual precepts and the structure of the camera (in particular, the aperture and the lens). Thus, the way we perceive photographs is related to what we believe about them. It is that perceptual base, on which visual precepts of the photographed object are formed, which lays the ground for an experience which is now no longer just perceptual, but rather cognitively based on other processes which determine the way we believe in photographic images as having a privileged epistemic status.

1. DEPICTION

The photographic image is the product of technology. The technological image is the result of a mapping of light. This mapping is subject to an aperture, shutter speed, with a given focal distance and certain framing. Photographs have a causal relation with the photographed object. This causal dependence is the reason why photography is often thought of as epistemically superior when compared to other media.

There is a link between the photographic image and the world. The causal relation establishes objectivity in photography. Photographs are traces of the photographed object. And as traces they convey information about what they are photographs of. Therefore, photographs are detections.

Photographic images are also depictions. A current approach links depiction to the visible; photographs are seen as a prosthetic extension of our capacities of vision. Kendal Walton takes depiction as a characteristic of a special kind of pictures, namely, the ones that contribute to "the enterprise of seeing".

Pictures, also when produced by a camera, allow us to see the world through them. So, depiction is a way of learning about the world in a realistic medium².

Photographs are transparent, "We see the world through them", the observer perceives the world (the seeing-through-photographs). The difference between sketches and photographs is the way we rely on them.

Walton asks: if we have an artist that sees a dinosaur and sketches it, and a photographer that sees the same dinosaur and takes its picture, what then is the difference between the two? "The manner in which we trust the photographer when his/her photographs convince us of the existence of the dinosaur differs significantly from the manner in which we rely on the artist when we are persuaded by his/her sketches. In both set of pictures, we have a counterfactual dependence on the scene in the jungle"³.

In photographs, the observer has visual experiences that do not depend on the beliefs of the picture maker. Our realization that photographs are bearers of "natural meaning" affects our experience of them. We think that photographs are accurate realizing that they are especially close to facts. Non-natural symbols, instead, are thought of as intermediaries that stand between us and the facts, which have their own meanings that may or may not correspond to the facts⁴.

For Walton, therefore, photographs are prosthetic devices which help our task of seeing. The photograph is located in the field of the structure of the visible.

Other authors deal with the requirements that photographs, as pictorial representations have to possess. Let us consider one author, Robert Hopkins⁵, who draws up a general theory of depiction by constructing it from six requirements. These requirements are: (X1) There is a significant minimum pictorial content. (X2) Everything depicted is depicted from some point of view.

(X3) Whatever can be depicted can be seen.

(X4) Pictorial misrepresentation is possible but has its limits.

(X5) General competence with depiction and knowledge of the appearance of O (be it a particular a or merely a, but no particular F – thing) suffice for the ability to interpret depiction of O.

(X6) General competence with depiction and knowledge of the appearance of O are necessary for the ability to interpret depiction of O⁶.

The author justifies each of the requirements: the (X1) determines that depiction is specifically visible. The second (X2), that it is submitted to perspective, a depiction of an object should represent it as spatially related to one (or several) point(s), from which the object is described. What is more, this point should be determined to some extent. The third requirement (X3) specifies that it is only possible to describe what can be seen, and not hidden things or aspects; as a consequence, what is visually described is as having an appearance. If we take a magnetic field as an example, which does not have a visual appearance, a representation of it will not be a depiction, but rather as a map not being a depiction of the area it represents, since it does not represent its specific appearance.

The fourth requirement (X4) specifies that erroneous pictorial representation is possible within certain limits. The author mentions that an image may represent the Eiffel Tower as blue, that is, the image may represent other properties which the represented object does not possess; it has to represent at least some of the properties of the represented object. The final two requirements (X5, X6) refer to the knowledge acquired (through the image) concerning the object represented. To understand the content of the representation, we have to possess general knowledge regarding the appearance of things⁷.

Now, this theory of depiction from Hopkins is based on three concepts: visibility, appearance and knowledge. The first three requirements constrain the depiction to depictions which are visible, and immediately there

is a major obstacle, a question arising of knowing if depictions are exclusively visible. Most authors provide arguments against this premise.

Therefore, for example, Husserl, in considering the image⁸, refers to the depiction as having at its foundation a relation of similarity, that relationship which is established between the subject of the image and the object of the image, which does not necessarily mean that the vehicle of the image has to be visible. He considers that there may be visible images and tactile images, with the other senses not being able, in themselves, to produce images⁹.

Images are external representations therefore clarifying these with regard to internal *re-presentations* (exclusively internal re-presentation phenomena). A depiction, according to Husserl's theory of the image, is a re-presentation now in a second sense. Starting from an external re-presentation to the extent that, being something that is constructed perceptively, it is always through the mediation of another thing that it has a phenomenal existence, an artefact from the physical world. It is a depiction and also a *re-presentation* to continue with Husserl, in a third sense, through incorporating a temporal element, which is displacement: while the perceptive act occurs in the present, the object which is represented in the image is not present. Something which is not present is now re-presented in the present.

We can start exactly from this clarification from Husserl between image and representation, in the context of a philosophy of the image. Images may be internal or external representations, with it being the case that the external ones are based on an artefact, a vehicle, visible or tactile. But, as we have seen, concerning precisely what Husserl developed, this is something which, in the images, is purely visible (the object of the image), an element of common visibility to all images, whether they are visible or not¹⁰, and it is precisely the objects of the image which Husserl would call *depictive images*, and, within his perspective, he would go on to develop theory of *depiction*.

This emphasis on the image results from the fact that Husserl phenomenologically sought cognitive structures. From the perception of the image until its awareness. Hence his studies on the philosophy of image were foundational, establishing genres of images, in accordance with the different types of cognitive operations involved, thus grouping his research around phantasy, awareness of the image and memory. *Re-presentations* and presentations are some of the cognitive operations which structure each of these types of images.

Now, we think that one of the main questions of contemporary philosophy of the image is the fact that the typology of images has become more complex, and this complexification of types requires a rereading of genres, the boundaries of which often fade away. Let us think of the example of images obtained from devices which allow us to maintain perceptual dynamic relations, such as the perceptive system normally processes, when there is no intervention of any device. This is, despite having a device, there is no true mediation, which can be seen in photography or images in movement, cinema or video.

We can also think of cases in which the experience of different types of images seems to coincide, as is the case when we have a hyperrealistic frame of a building and, when looking at it, we understand that it is a photograph; the same also with regard to (digital) images of objects, such that we cannot distinguish photographs.

However, I would argue that, given the contemporary multiplicity of devices and supports (or vehicles) for images, it is important to carry out an inverse movement. Starting from the analysis of the materiality and corresponding specific experience of each type of image, an analysis which involves the support, device and respective cognitive processes. The start is, in this way, in our case, the photographic image, to question it as mediation, a specific type of representation, which corresponds to the depictions, distancing it from, for example, the images produced

by devices that function as visual prostheses, the experience of which is very similar to the full experience of the visual perceptive system of our body, in its environment.

We are therefore dealing with a phenomenological approach which will underline what is specifically visual in images and what is intentional. A depiction here is a visual object, different from the object which is depicted. Husserl addresses the topic of the image exhaustively in Volume XI of his collected works dated between 1898 and 1925, which is entitled "Phantasy, Image Consciousness and Memory."¹¹ In chapter 9 of this work, and more specifically in paragraph 14 of Appendix IV, he sketches the main outlines of a theory of the image as depiction. "Every image must be the bearer of a 'sensuous semblance'; it must have an 'image object' intuited different from it, built along it in the same presentational foundation, hence standing in partial conflict with it"¹². "Depiction obviously presupposes resemblance, indeed, even perfect likeness. This must be our point of departure"¹³.

But what kind of resemblance is that between the image object and its subject? "The likeness must concern what is intuited, the appearance of the subject, not merely unintuited determinations. Can the appearance of the object be the same as the appearance of the subject, completely like it? Yes and no depending on how one takes it"¹⁴.

Using Lambert Wiesing's expression, the image object is what the observer thinks he or she sees in the image carrier. A visual object, removed from the laws of physics¹⁵, autonomous relating to the physicality of the photographed object. It is an intentional object.

2. THE INTENTIONAL OBJECT

What experience is then that of this intentional object? In literature we see it described as the experience of an artificial presence, of proximity or of transparency.

Artificial presence is the characteristic Lambert Wiesing assigns to Husserl's concept of depiction. Depiction is the object of a perception; we can see the image object. But it is not a form of symbolized sense. We cannot see in it content or sense. The sense is a rule determining how we can refer to something through a sign, and a rule cannot be perceivable¹⁶.

When an image is produced, it is not a sign that it is created but an object, an image object, an object of pure visibility. A form of artificial presence.

Mikael Pettersson reminds us that throughout the history of photography this experience of photographs has been described as involving a "feeling of closeness" towards the subject depicted. This feeling of closeness is not present in drawings or in paintings but is exclusive to photographs. He calls it the proximity aspect of our experience of photographs¹⁷.

This would explain the Barthesian notion of photography as something that relates us to the past, as an emanation of the referent, a "that-has-been".

Mikael Pettersson labels this notion of the photographs as part of something that has existed, the ontological commitment. This commitment, in his view, would not be enough to explain the phenomenological bond with photographs in our society.

The capacity to capture details would provide an identity of aspect with the thing represented. This capacity differs from the displaying of details, which is a simple difference of degree. The capacity for capturing details entails a certain interpretation of our perception responsible for the proximity aspect.

"...Because of the mechanical nature of photographs, looking at photographs and seeing face-to-face both make for a belief-independent counterfactual dependence

between one's visual experiences and the looked-at scene"¹⁸.

Depictive traces is how he describes photographs, pointing out that the most important aspect of photographs is whether the observer experiences the pictures as depicting the subject, not that the observer believes that photographs depict their subject¹⁹.

3. THE CORRESPONDENCE PRINCIPLE

Like this two authors, following Husserl, although perceptive mechanisms contribute to its understanding, depiction is not linked only to perception, but the experience of the process of seeing is equally necessary. The correspondence between the two processes is essential to fully clarify depiction.

The two authors, following Husserl, mentioned above, underline the observer's experience of the image, the visibility element of the image: Lambert Wiesing mentions what the observer thinks he or she sees in the image carrier, Mikael Pettersson an interpretation of our perception.

When the appearance of the object (the image object) is the same as the appearance of the subject, Husserl calls this connection likeness. But when the appearance of the object is not completely like the appearance of the subject, then a conflict may occur. When the image object is only like one part, image consciousness conflicts with perception consciousness. The connection is then not of likeness but of resemblance²⁰.

And this is the common characteristic between images in general and photographs. Photographs are bidimensional, they are traces of corporeal, three-dimensional photographed objects.

If we think that, for example, a drawing is also bidimensional, and in a drawing we may also have resemblance, what then is the specificity of photographs?

In ordinary image consciousness, we are aware of the conflict between image consciousness and perception consciousness. "The "image" claiming a place: but the place set into reality? The image space set into the "actual" space of perception, but not fitting into this space? Conflicting with it?"²¹.

When Husserl speaks about semblance, this means the "non-presence"²² of the image object. The image object is not compatible with what is actually present – they are mixed, thus conflicting²³. The image object is not real, it re-presents the image subject appearing as present. The real present and the appearance present conflict.

In photographs, what is the nature of this conflict between the real present and the appearing present? It is a conflict of a direct and independent nature.

One relevant property of vision is the tendency to group information into a meaningful object. An early stage of vision starts with local information with contour detection by cortical cells. But this local, fragmentary information is gathered leading to the recognition of the object. This means that, even in these early stages, the brain groups local features of the form and compares them into a global percept.

This is an initial stage of visual perception in the global process of perception. The appearance of the object can vary, depending on its spatial arrangement, color, and depth. Our perceptual system undergoes a set of processes starting with detection, discrimination until identification. In identification, the current environmental stimulus faces stored knowledge about the object.

If the brain does not have enough information from the final processes of visual perception, it tends to group information from the early local features into a

form, even if that form is only vaguely suggested by the bits and pieces²⁴.

Seeing is adaptive. "Rather than experiencing a conglomeration of unconnected contours scattered throughout the field of view, we see these contours organized into whole objects whose size and shapes remain constant. This organization in perception mirrors the organization of real objects as they actually exist. The correspondence between perceptual experience and the objects represented in that experience is not accidental. After all, the visual system did evolve for a purpose, namely, to inform us about the objects which we need to interact with"²⁵.

Our perceptual experience provides us with a stable relationship regarding our environment; it assures that the way in which we perceive corresponds to the organization of what is perceived.

In the photographic image, the connection with the thing photographed is based on the similarity between the processes of the formation of the image and our perceptual system. The structure of the lens mimics the eye. So, the way we perceive photographs is related to what we believe about them.

Although the image object is a pure visual object, autonomously related to the physicality of the object photographed, the depiction as a visual object is built as a set of perceptual features that correspond to at least some features of the photographed object. This correspondence is independent because it is rooted not in some symbolic representation or mimesis but in the similarity of the constitutive physiological processes of perception and the mechanical processes of the photographic image. The connection between the aperture and the structure of the lens is the key element on which the mechanical device is built.

Depiction involves resemblance regarding the appearance of the photographed object, but this resemblance does not have to be complete, exactly

the same. In photographs, there might be only enough resemblance between local features to allow the forming of the percept of the object photographed.

The observer's visual experience is built on the fact that photograph features correspond independently of the features of the photographed object.

This correspondence between the perceptual features of the image object and the features of the photographed object are rooted not only in the causal dependency between them but mainly on the observer's experience, on the similarity of the process of our perceptual system and the mechanical photographic image formation.

NOTES

¹ Kendall Walton; 1984, *Transparent Pictures: On the Nature of Photographic Realism*, Photography and Philosophy, Ed. Scott Walden, 2010, Wiley– Blackwell.

² Idem, p. 21–22.

³ Idem, p. 37.

⁴ Idem, p. 41.v

⁵ Hopkins (1998). *Picture, Image and Experience*. Cambridge, Cambridge University Press, p. 23 ss.

⁶ “(X1) There is a significant minimum pictorial content. (X2) Everything depicted is depicted from some point of view. (X3) Whatever can be depicted can be seen. (X4) Pictorial misrepresentation is possible, but has its limits. (X5) General competence with depiction and knowledge of the appearance of O (be it a particular a or merely a, but no particular F – thing) suffice for the ability to interpret depiction of O. (X6) General competence with depiction and knowledge of the appearance of O are necessary for the ability to interpret depiction of O”. Idem. p. 23 ss, 73 ss.

⁷ “How things look”. Ibid. p. 34.

⁸ Husserl, Edmund, (2005) *Phantasy, Image Consciousness and Memory*, (1898–1925). Trans. John B. Brough, Dordrecht, Springer.

⁹ 10 PICM, p. 138, [126].

¹⁰ PICM, p. 161 ss [141 ss].

¹¹ Husserl, Edmund, (2005) *Phantasy, Image Consciousness and Memory*, (1898–1925). Trans. John B. Brough, Dordrecht, Springer, Appendix III (to §14), p. 155.

¹² Idem.

¹³ Idem.

¹⁴ Ibidem.

¹⁵ Lambert Wiesing; 2010, *Artificial Presence*, Philosophical Studies in Image Theory, Stanford, Stanford University Press, p. 17–19.

¹⁶ Idem.

¹⁷ Mikael Pettersson; 2011, *Depictive Traces: On the Phenomenology of Photography*, The Journal of Aesthetics and Art Criticism, vol.69, n°2, spring 2011, p. 185.

¹⁸ p. 187.

¹⁹ Idem, p. 192.

²⁰ Husserl, Edmund, *Phantasy, Image Consciousness and Memory*, trans. John B. Brough, 2005, Dordrecht, Springer, Appendix III (to §14), p. 156.

²¹ Idem, Appendix IX, p. 180.

²² Ibidem.

²³ “In the case of the ‘phantasy image’, however, we have no appearing present and thus no contradiction with the actual present.”, p. 180.

²⁴ Sekuler, R, Blake R, *Perception* McGraw–Hill, 1994, p. 136.

²⁵ Idem, p. 139.

REFERENCES

Husserl, Edmund. *Logical Investigations*, trans. J. N. Findlay, ed. Dermot Moran, 2001, Routledge.

Husserl, Edmund. *Phantasy, Image Consciousness and Memory*, trans. John B. Brough, 2005, Springer.

Hopkins, Robert. *Picture, Image and Experience*. Cambridge: Cambridge University Press, 1998

Kendall Walton. 1984, *Transparent Pictures: On the Nature of Photographic Realism*, in “Photography and Philosophy, essays on the pencil of nature”, Ed. Scott Walden, 2010, Wiley– Blackwell.

Kulvicki, John. *On Images: Their Structure and Content*, Oxford: Oxford University Press, 2009.

Kulvicki, John. *Images*. London: Routledge. 2014.

Pettersson, Mikael. *Depictive Traces: On the Phenomenology of Photography*, 2011, The Journal of Aesthetics and Art Criticism, vol.69, no. 2, spring 2011.

Savedoff, Barbara. *Transforming Images: How Photography Complicates the Picture*, 2000, The Cornell University Press.

Sekuler, R, Blake R. *Perception*, McGraw–Hill, 1994.

Scruton, Roger. *Photography and Representation*, in “Photography and Philosophy, essays on the pencil of nature”, Ed. Scott Walden, 2010, Wiley– Blackwell.

Wiesing, Lambert. *Artificial Presence, Philosophical Studies in Image Theory*, 2010, Stanford University Press.

Zeimbekis, John. *Digital Pictures, Sampling and Vagueness: The Ontology of Digital Pictures*, 2012, The Journal of Aesthetics and Art Criticism, vol.70, no. 1, Winter 2012.

INVESTIGADORES RESEARCHERS

DOUTORADOS INTEGRADOS
INTEGRATED PhD

Alexandra Moreira
Ana Curralo
Helena Barbosa (coordinator)
Sandra Antunes
Suzana Dias

ESTUDANTES DE DOUTORAMENTO
PhD STUDENTS

Aurora Brochado
Igor Ramos

